

Exchange of Social Support within the Older Generation:

Evidence from Korea

Thesis

presented to the Faculty of Arts and Social Sciences

of the University of Zurich

for the degree of Doctor of Philosophy

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Accepted in the fall semester 2015

on the recommendation of the doctoral committee:

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Zurich, 2017

ABSTRACT

This dissertation takes individual differences into consideration and aims to provide a basis to develop a positive culture of healthy aging by examining the latent potential and possibilities of exchanging social support within the generation of older adults in Asia. This dissertation is composed of five parts with three main studies.

ZUSAMMENFASSUNG

Diese Dissertation berücksichtigt individuelle Unterschiede und zielt darauf ab, eine Grundlage darzustellen, um eine positive Kultur des gesunden Alterns durch die Untersuchung des latenten Potenzials und der Möglichkeiten des Austauschs von sozialer Unterstützung innerhalb der Generation von älteren Menschen in Asien zu entwickeln. Diese Dissertation besteht aus fünf Teilen mit drei Hauptstudien.

Acknowledgements

I would like to express my deepest gratitude to my advisor Prof. Dr. Mike Martin for giving me the opportunity to broaden my knowledge and perspectives in the field of ageing research outside of Asia. With his guidance and support, I could freely pursue my interest in an excellent research environment and discover my own potential. It is my biggest honor to have met him and to be a student of his.

My sincere thanks also goes to Dr. Christina Röcke who taught me so many things from the basics without any judgment. Her advice and encouragement turned my curiosity and worries into worthy outcomes, and helped me to gain confidence to go out into the world. I truly admire her knowledge and I shall never forget her kindness.

I would also like to express my deep appreciation to Prof. Dr. Friedrich Wilkening for generously offering his time and reviewing this thesis.

I am thankful to my colleagues and friends, particularly Adriana, Gianclaudio, Horst, Josua, Julia, Kai, Kathrin, Vera, and Yolanda for supporting me in many ways and giving me wonderful memories. A special thanks to professors and friends mostly located in Korea, Taiwan, and US for their continuous support from a distance.

I would like to thank my family: my father Prof. Dr. Shim who is a great educator and my mother Mrs. Choi who is a great philosopher, for devoting their life to raising me with endless love, patience, and infinite support. I thank my brother Gi Sup for being the best brother and my husband Renato for accompanying me all the way with respectful advice and enormous support while only wishing the best for me.

Through completing this dissertation, I experienced the huge impact of social support, which I wish more people could benefit from.

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ABSTRACT

This dissertation takes individual differences into consideration and aims to provide a basis to develop a positive culture of healthy aging by examining the latent potential and possibilities of exchanging social support within the generation of older adults in Asia. This dissertation is composed of five parts with three main studies.

In two primary studies, the intragenerational support potential in Koreans 65+ (Study 1) and relationship between available resource and actual social support behavior (i.e., financial support) (Study 2) were examined using the Korean Longitudinal Study of Ageing (KLoSA; $N = 3,384$ adults aged 65+ years). In the following step, six experts from the field of gerontology were interviewed in depth and the potential facilitators for promoting support behavior of Koreans 65+ were explored (Study 3). The results of Study 1 present two different trends for a change in functioning over two years; the majority of Korean older adults showed a decline in functioning, but some individual cases showed improved or stabilized functioning over time. The results of Study 2 indicate that there are several factors, which determine the support behavior of older adults, such as working status, physical health, frequency of contact with children and relationship satisfaction with children. Findings of Study 3 suggest that the way to promote social support behavior is not only limited to individuals but should include the government and society as a whole.

In addition, the conceptual framework of social support based on the definition of needs among older adults will be discussed in the theoretical background section. Finally, the discussion part of the dissertation will provide an overview of each study and interesting insight into aging in Asia, where the ageing population is growing rapidly while the cultural phenomenon of filial piety is diminishing.

ZUSAMMENFASSUNG

Diese Dissertation berücksichtigt individuelle Unterschiede und zielt darauf ab, eine Grundlage darzustellen, um eine positive Kultur des gesunden Alterns durch die Untersuchung des latenten Potenzials und der Möglichkeiten des Austauschs von sozialer Unterstützung innerhalb der Generation von älteren Menschen in Asien zu entwickeln. Diese Dissertation besteht aus fünf Teilen mit drei Hauptstudien.

In zwei Hauptstudien, wurde das intragenerationelle Unterstützungspotenzial bei Koreanern über 65 (Studie 1) und die Beziehung zwischen den verfügbaren Ressourcen und das tatsächliche, soziale, unterstützende Verhalten (d.h. die finanzielle Unterstützung) (Studie 2) unter Verwendung der koreanischen Longitudinal Study of Ageing (KLoSA; N = 3384 Erwachsene im Alter von über 65 Jahren) erforscht. Im folgenden Schritt wurden sechs Experten aus dem Bereich der Gerontologie in der Tiefe interviewt und die potenziellen Facilitatoren für die Förderung des unterstützenden Verhaltens der Koreaner über 65 (Studie 3) untersucht. Die Ergebnisse der Studie 1 zeigen zwei unterschiedliche Trends bezüglich der Änderung der Funktionstüchtigkeit in mehr als zwei Jahren auf; die Mehrheit der koreanischen, älteren Erwachsenen zeigten einen Rückgang der Funktionstüchtigkeit, aber in einigen Einzelfällen zeigte sich über die Zeit eine verbesserte oder stabilisierte Funktionstüchtigkeit. Die Ergebnisse der Studie 2 zeigen, dass es mehrere Faktoren für das unterstützende Verhalten der älteren Erwachsenen gibt, wie die Arbeitsfähigkeit, die körperliche Gesundheit, Häufigkeit des Kontakts mit erwachsenen Kindern und Beziehungszufriedenheit mit Kindern. Ergebnisse der Studie 3 legen nahe, dass die Art und Weise des sozialen, unterstützenden Verhaltens nicht nur auf Individuen beschränkt ist, sondern auch die Regierung und die Gesellschaft als Ganzes miteinbeziehen sollte.

Darüber hinaus wird der konzeptionelle Rahmen der sozialen Unterstützung auf der Grundlage der Definition der Anforderungen bei älteren Erwachsenen im Abschnitt “theoretischer Hintergrund” diskutiert. Schließlich gibt der Diskussionsteil der Dissertation einen Überblick über jede Studie und interessante Einblicke über das Altern in Asien, wo die Alterung der Bevölkerung schnell wächst, während das Kulturphänomen der Pietät rückläufig ist.

INTRODUCTION

The rapidly growing number of older individuals with limited resources is a huge concern for both developed and developing countries. Also, the ageing population has become a global challenge both for the economy and the wellbeing of people (United Nations [UN], 2013). Previous studies revealed the compensatory and positive effects of social support on the wellbeing, autonomy, and health of older adults (Phillips, Siu, Yeh, & Cheng, 2008; Tyler, 2006; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Furthermore, the better outcome of social support can be derived from different factors, such as cultural background and norms (Taylor et al., 2004), gender differences (Tyler, 2006), age (Baltes & Mayer, 1999), proper timing with relation to support provider and receiver (Hlebec, Mrzel, & Kogovšek, 2009), and support reciprocity (Walster, Walster, & Berscheid, 1978), etc.

Despite the importance of social support for older adults and its extensive amount of existing research, many questions are still unanswered. Especially, relatively little attention has been paid to the exchange of social support within the generation of older adults (intragenerational support potential). Researchers from different disciplines have found that older adults are influenced by biological, psychological, and socio-economical factors and, hence, are in a period of progressive decline of functional abilities with aging (Leung, Chen, Lue, & Hsu, 2007; Park & Lee, 2007; World Health Organization [WHO], 1996). However, there are studies indicating that there may be other factors influencing the functional domains of older individuals besides age (Baltes & Mayer, 1999) and highly regard individual variability (*heterogeneity*) (Martin & Hofer, 2004). Nevertheless, most aging studies are conducted with mean differences (*homogeneity*) and describe results as a part of the aging process and focus on older adults as recipients. It is still unclear whether the

level of individual potential influences actual social support behavior or whether there are other factors influencing social support behavior. Therefore, this dissertation examines the following topics with regard to the social support among older adults in the Republic of Korea (here after Korea): (a) social support potential of Korean older adults (Study 1), (b) the relationship between different types of available resources and actual support behavior (Study 2), and (c) facilitators to promote social support behavior among Korean older adults (Study 3).

Social support potential was measured at two occasions using proxy variables in the support domains of aid (guidance, financial and physical support) and affect (emotional support). Study 1 analyzed the existing potential at each occasion, mean-level change in potential over time, and individual differences in support potential changes. In Study 2, the level of support potential (i.e., financial support potential), level of functioning, relationship with children and socio-demographic characteristics were examined to test the factors that may influence financial support behavior in Korean older adults. In Study 3, qualitative interviews were conducted with 6 experts (total working experiences in the field of gerontology = 155 years) to obtain expert perspectives on factors facilitating or hindering the exchange of support including cultural factors specific to Asia.

Korea is experiencing an especially high speed of aging and diminishing cultural concept of filial piety. Hence, Korea can be seen as laboratory for ageing research that may provide unique and complementary insights into the core aging research conducted in Western societies. Furthermore, it provides interesting glance into ageing in Asia.

This dissertation is composed of five main parts. In the first chapter, the conceptual framework of social support and different needs among adults aged 65+

will be discussed in the theoretical background section. In the second chapter, the research questions of three studies that were conducted for this dissertation will be introduced. In the third chapter, the research methods used for analyzing those three studies will be presented. In the fourth chapter, the findings from each study will be discussed. In the fifth chapter, the summary, limitations, and implications with regard to exchange of social support within the older generation in Korea will be discussed.

CHAPTER 1: THEORETICAL BACKGROUND

Individuals in different situations might need different amounts and types of support. However, there is not a single, agreed-upon definition of social support and neither for needs. Since different definitions and measurements might influence the result of the study, it is very important to clarify the concept of social support and needs prior to conducting the study. Therefore, all available articles were reviewed in order to build a conceptual framework for social support potential within the 65+ age group. A literature review was conducted by carrying out computer-based searches from three databases—PubMed, PsycINFO and ISI Web of Science—for all published articles in the English language. These three databases were chosen taking into consideration the purpose of this study, which is to investigate the protective and risk factors of social support across multiple disciplines of biology, psychology and socio-economics.

Kahn and Antonucci (1980) propose three types of support, which are aid (tangible assistance), affect (emotional support), and affirmation (intangible communication). Despite a large variety in the conceptualizations of social support in the literature, these three types have been identified as encompassing all known support types (Antonucci, Birditt, & Akiyama, 2009; House & Kahn, 1985). Therefore, the conceptual framework of this dissertation regarding social support is based on these three social support types.

In this chapter, first, the needs of older adults, derived from the broad concept of needs, will be discussed. Second, the meaning of social support for older adults, and especially for Asian older adults, will be reviewed while introducing the concept of social support. Finally, the reason for taking Korea as a sample for this dissertation will be explained.

1.1 Definition of Needs

Support behaviors are specific acts that convey intentional efforts to help people in need (Hlebec et al., 2009), but support must meet the needs of people because it could affect

the outcome. Thus, defining or identifying “the need” should be handled carefully prior to discussing social support. Some scholars attempt to differentiate types of need. There are different conceptual definitions regarding “needs”. Mallmann and Marcus (1980) claimed, “a need is an objective requirement to avoid a state of illness” and the need as a “generic requirement that all human beings have in order not to be ill”. Another perspective was raised that “needs are constructed by the social structure and have no objective content” (Rist, 1980). Some scholars point out that the definition of need should be distinguished from “a want, a wish, a desire and a demand” (Galtung, 1980; Lederer et al., 1980). According to Lederer et al. (1980), the subjective notion of needs depends on what people “think” of their needs and it refers to “desire” rather than need, when the objective notion of needs depends on what people “should have, irrespective of their individual perception” and refer to what we should call “needs”. Bradshaw (1972) distinguished four types of social needs that are normative (professionally defined), felt (what people want), expressed (unmet need or demand), and comparative (measured by reference).

While it is hard to unify the terms of needs, some studies on the effect of social support were also conducted based on the theory of the five types of Maslow’s hierarchy of needs. For instance, (a) in old age (61-80), there is a significant decline in self-actualization needs but a significant increase in physical and security needs (Ojha & Pramanick, 2009); (b) Majercsik (2005) reported that needs proved to oppose Maslow’s theory when applied to geriatric patients by accentuating the self-actualization and self-esteem needs; (c) Hahn and Oishi (2006) found that there were cultural differences for preferences of needs, for instance, the most important need for Americans (Western) was self-esteem, whereas for Koreans (Asian) was self-actualization. Likewise, different preference of needs was observed depending on the participant’s characteristics based on the same Maslow model. Various researchers have criticized Maslow’s model. For instance, Galtung (1980) indicated that Maslow’s model is a “reflection of western culture biases”.

Likewise, previous studies and existing data confirm that needs for older adults may vary widely, and therefore it could be impossible to list all types of needs (Galtung, 1980; Lederer et al., 1980; Maslow & Lowry, 1973). It is hard to clarify the definition of needs, especially when there is no scientific basis for defining a needs hierarchy (Heller, 1980). Whether the term is subjectively or objectively defined, it is clear that the psychological, physical and socio-economical needs are required regardless of age. Hence, the term of needs in this dissertation will encompass both the subjective and objective notion of the needs, and define the concept at three levels that are psychological needs, physical needs and socio-economical needs based on the “general risk factors of older adults” as will be seen below.

1.2 Needs of Older Adults

People might find limited access to fulfill their needs as they age. Sometimes people might even experience an increased level of needs because ageing is often associated with a lower socio-economic status and geriatric diseases (Leung et al., 2007; Park & Lee, 2007). The elderly population with unfulfilled needs not only negatively influences the whole economy but also the wellbeing of the rest of the community (UN, 2001). Moreover, increased numbers of aged individuals in a population with a variety of needs may cause societal challenges, for instance, increased demands on health services and social security (UN, 2001).

It is expected that more people will survive to old ages; however, researchers from different disciplines have found indications for progressive decline in a number of functional abilities with aging (Leung et al., 2007; Phillips et al., 2008; Tyler, 2006; Uchino et al., 1996). According to Park and Lee (2007), older adults are influenced by biological, psychological and socio-economical factors and, hence, are in a period of progressive decline of functional abilities.

Table 1. *The Risks of Older Adults Based on Previous Studies*

Types of risk	Common symptoms
A. Physical risks	<ul style="list-style-type: none"> a. Dementia b. Falls c. Incontinence d. Loss of appetite e. Weakness, etc.
B. Psychological risks	<ul style="list-style-type: none"> a. Increase of anxiety and depression b. Loss of interest c. Loss of initiative d. Loss of attention e. Loss of motivation, etc.
C. Socio-economic risks	<ul style="list-style-type: none"> a. Being isolated b. Poverty c. Withdraws from usual activities

Resources. Leung, 2007; World Health Organization [WHO], 1996.

According to the studies mentioned above, people are exposed to an increasing level of the three main types of risks with aging. The important thing to notice in the field of aging studies is that those risks are mutually related and declining in one function can lead to the declining of the other functions. Having an increased level of illnesses, or mental decline was also observed with regard to physical risks; cognitive decline or depression was observed in the psychological domain; and decreased level of social contact and increased level of poverty was observed as the risk of the socio-economic domain. Such observations, in turn, indicate the needs of older adults, for instance, physical, psychological and financial support.

Specifically, the loss of physical status can lead to personality changes or result in depressions which eventually place older adults in need of both physical and psychological support and vice versa (Park & Lee, 2007). On the other hand, Chou, Chi, and Chow (2004) revealed that when older adults are under financial strain then they are more likely to exhibit depressive symptoms. This kind of depression can lead to functional and cognitive decline of older adults (Lee et al., 2012; Steffens et al., 2009). In the end, physical functional decline,

socio-economic risk and psychological functional decline are all mutually related and will eventually make older adults needing different types and higher levels of support. Evidence of this from the previous studies can be found below (see Table 2).

Table 2. *The Evidence of Psychological, Physical and Socio-Economical Risks Among Older Adults*

Type 1: Psychological and physical risk
<ul style="list-style-type: none"> • Reduced cognitive flexibility is related to decreased physical performances and weaker muscle strength (Huh et al., 2011). • Arthritis was characterized by widespread psychosocial concerns, particularly related to chronic stress and poor mental health (Harris, Loxton, Sibbritt, & Byles, 2012). • The number of chronic diseases and the presence of a disability were both associated with increased depression symptom scores (Jang et al., 2009) • There is strong evidence from most studies that greater functional impairment and increase in depression in the older adults are reciprocally related (Lee et al., 2012).
Type 2: Psychological and socio-economic risk
<ul style="list-style-type: none"> • Income can also influence life satisfaction indirectly by mediating social participation (Mertens, Bosma, Groffen, & van Eijk, 2011) • The two items of stress most associated with increased in depression were higher perceived health stress and financial stress (Lee et al., 2012) • No matter what the major source of income of an older adult is, if they are under financial strain, they are more likely to report depressive symptoms than those who are under no financial strain (Chou et al., 2004)
Type 3: Physical and socio-economic risk
<ul style="list-style-type: none"> • Aging is often associated with lower socio-economic status. Indeed, older adults often face poverty as the result of retirement, social isolation, and the loss of medical care, resulting in a decline in health status (Grundy, 2000). • Difference in poor health between age groups decreased after adjustment for education, employment, and income disparities which indicated that the low socio-economic status influences the health status of the older adults, and not by age alone (Park et al., 2012) • Disability leads to restriction in social activities and isolation, which are important precipitants of greater depression (Carriere et al., 2009).

1.3 Definition of Social Support

Shumaker and Brownell (1984) defined social support as “an exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the wellbeing of the recipient”. Cohen and McKay (1984) have categorized the term of social support with tangible, appraisal and emotional support, while there are many researchers who distinguish the types of social support between psychological (referring to the provision of information) and non-psychological (referring to the provision of material). Meanwhile, House and Kahn distinguished four types of potential social support (Cooke, Rossmann, McCubbin, & Patterson, 1988), which are emotional support (i.e., caring, love, trust, etc.), instrumental support (i.e., aid in kindness, money, time, etc.), informational support (i.e., advice, information, defectiveness, etc.), and appraisal support (i.e., providing feedback, social comparison, self-evaluation, etc.). Finally, Kahn and Antonucci (1980) claim three types of support, which are aid (tangible assistance), affect (emotional support), and affirmation (intangible communication). According to Antonucci et al. (2009), these three types have been identified as encompassing all known support types. House and Kahn (1985) also argued that these three aspects of the measurement distinguish both types and sources of support.

Likewise, the individual in different situations might need different amounts and types of support (Antonucci et al., 2009; Maslow, 1973), but different scholars use different forms and methods. Likewise, “support” which should meet the needs of the person, also can be defined in a variety of ways in different fields of research. However, the definition, measurement, and methodology of research on social support can vary depending on the purpose of the study and, therefore, might influence the results of each study. Hence there is not a single, agreed-upon definition (Antonucci et al., 2009; Öztop, Şener, Güven, & Doğan, 2009; Tang, 2008). Considering that the main aim of this study is to examine the possibilities and willingness of exchanging social support, Antonucci’s classifications that include both

subjective and objective notions of social support will be used in this dissertation with some exclusions.

Therefore, the focus on this dissertation will be on the two domains of “Aid” and “Affect” with four subcategories of “guidance support”, “financial support”, “physical support”, and “emotional support”. The other domain of “affirmation” is excluded due to several limitations for conducting the study. The reason is because the two domains of the support mentioned above is the most acute support that matches with the general risks and needs of older adults based on a previous study. Cohen and Syme (1985) also argued the domain of social support, though usually not discussed, is the instrumental or tangible support that is of particular importance to many of the aged.

1.4 Social Support: An Important Personal Resource

Social support is an important resource for counteracting negative impact of chronic illness and depression and enhancing psychological wellbeing and physical health conditions (Park & Lee, 2007; Russell & Cutrona, 1991). Many previous studies revealed that the positive effects of different types of social support on the wellbeing, autonomy, and health of older adults. There is evidence that older adults with a high level of social resources have better functioning in everyday life (Lang, Rieckmann, & Baltes, 2002). Moreover, people who are more socially connected report higher levels of social satisfaction and are able to maintain high levels of wellbeing despite changes in the size of their social network across the life span (Wrosch, Riegelmeier, & Hoppmann, 2013). Smith, Borchelt, Maier, and Jopp (2002) noted that social participation and social contacts are prime sources of positive affect on positive emotions and under these circumstances, interpersonal resources may be of particular importance as one means of compensation for losses, etc.

Some arguments have been made that social support behavior can decrease the negative impact of chronic illness, depression and have a positive influence on psychological

well-being and better physical health conditions (Charyton, Elliott, Lu, & Moore, 2009; Leung et al., 2007; Phillips et al., 2008; Tyler, 2006; Uchino et al., 1996). More specifically, social support has a positive effect on the psychological and physical wellbeing of older adults. For instance, Lee et al. (2012) found that more social support and fewer mobility limitations were predictors of decreased level of depression in older adults; Mertens et al. (2011) indicated that social resources and social support can help a person adapt to ongoing strains when dealing with chronic disease; Shin et al. (2008) found that geriatric depression was more prevalent in a poor social support group than a normal social support group; Harris et al. (2012) found that women from the 1946-1951 cohort who received functional forms of social support only occasionally or not at all reported 1.5 times more of a diagnosis of arthritis compared to women who had social support available all the time.

The rapidly growing number of older individuals with limited resources is a huge concern for both developed and developing countries and the ageing population has become a global challenge both for the economy and the wellbeing of people (UN, 2013). Despite the importance of social support for older adults and concerns on the aging population, relatively little attention has been paid to the availability of social support and its potential *within* the generation of older adults (*intragenerational support potential*), especially in Asia. However, for countries with a rapidly growing aging population as is the case in many Asian countries, exchanging of social support among older adult peers is becoming necessary.

Although some previous studies revealed that older adults are in a period of progressive decline of functional abilities related to biological, psychological and socio-economic aspects (Borg, Hallberg, & Blomqvist, 2006; Chou et al., 2004; Lee et al., 2012; Park & Lee, 2007; Steffens et al., 2009), there are evidences that proves individual differences in functioning and changes are multi directional and some show stability in a number of psychological functioning domains (Kunzmann, Little, & Smith, 2000; Lindenberger & Baltes, 1997). D'Augelli (1983) indicated that older adults are disadvantaged to the access of new resources

they might need due to societal conditions. For instance, retirement policy is associated with decreased level of material resources and reduced size of social network. However, some recent studies reported that age is not the only factor which influences the functional domains of older individuals (Baltes & Mayer, 1999; Spalter, Brodsky, & Schnoor, 2014), and they point out the importance of acknowledging individual variability (Martin & Hofer, 2004). Foa and Foa (2012) noted that a “resource” could be anything that could be transferred between people and suggested six types of resources exchanged interpersonally, including love, status, information, money, goods and services. Therefore, there are also different types of support and resources that older adults can provide to others, for instance, if not instrumental support then emotional support or vice versa.

1.5 Importance of Support Exchange

An increased amount of attention has been paid to the effects of social support on the wellbeing of older adults; however, previous literature suggested that several other factors be considered in order to produce better outcomes of social support. Regardless of the positive effect of social support, other studies have found different but notable aspects of support behaviors that are necessary to consider when discussing social support. Here are five things to consider when discussing “effective” social support based on previous studies.

First, is the timing. It should be noted that supportive behaviors are not helpful when it does not meet the proper timing, needs or relationship with oneself (Hlebec et al., 2009). Second, there are gender differences in interpreting support behaviors. For instance, Tyler (2006) found that receiving support is associated with the feeling of guilt for women and providing support could be perceived as a burden when compared with men. Third, there are cultural differences and preferences on support behaviors. For instance, Asians are less likely to seek social support than Europeans or Americans because it is considered to be associated with the faces of their families and friends under the cultural background and norm (Taylor et

al., 2004). Moreover, even though marriage is known to be a protective factor especially for the life of the older male adults (Aylaz, Aktürk, Erci, Öztürk, & Aslan, 2012), it is not applicable in Korea where patriarchal and Confucian norms still exist. Jang et al. (2009) found that the marriage does not have a beneficial effect on older Korean women due to their gender role. For instance, older female Koreans who received support from their husbands showed a higher life satisfaction score, but older male persons who only provided support to their spouses showed a lower life satisfaction score (Kim, Lee, Hisata, & Kai, 1996). Fourth, age differences should be taken into account when discussing social support of the older person. According to the *Berlin Aging Study* (Baltes & Mayer, 1999), very old persons (aged above 85) are more challenged to psychological resilience, social conditions and physical decline than young old persons (aged between 70-85). Moreover, there might be cohort differences in Korea between those who have gone through the Korean War (1950), and Japanese colonial suppression (1910~1945) where the fast social changes could make a difference in the health status, education level, etc. of the older person.

Finally, support reciprocity may be relevant. Walster et al. (1973) equity theory provides a model that explains that individuals need to balance between benefits and contributions. Akiyama, Antonucci and Campbell (2008) indicated that the term “reciprocity” reflects the meaning of exchanges (i.e., giving and receiving) of tangible aid, affection, advice or information between individuals or groups. Effects of providing support by older adults and support reciprocity are especially worth investigating because balancing the exchange relations affects psychological or emotional health of older adults. Dempsey et al. (2012) indicated that feelings such as being a burden to support produces feelings of guilt, depression and loss of dignity when one is not able to reciprocate support for what they have received (as cited in McPherson et al., 2007, p. 1151). Thomas (2009) also found that giving support was positively associated with the well being of older adults. Among older Korean persons, people

who exchanged support showed a higher quality of life [QoL] than those who only received or provided (Kim et al., 2000).

1.6 Financial Support in Asia is More than Money Itself

Financial support is of crucial importance to Asian older adults among different types of support. Financial strain is found to be a factor that lowers the feeling of control and self-worth and decreased level of such personal resources may increase the level of depression (Krause, Jay, & Liang, 1991).

Previous studies found that socioeconomic resources were important predictors of mental health, and economic dependence was negatively related to health and life satisfaction in older adults (Bishop, Martin, & Poon, 2006; Chou et al., 2004, Lee et al., 2012; Park, Cho, & Jang, 2012). Korea ranked at the top of suicide rates among OECD countries and it shows an acute suicide rates in Korean older adults (Park, Ahn, Lee, & Hong, 2014; Kim, Kim, Kawachi, & Cho, 2011). The highest suicide rates are often observed in the group of older adults in most industrialized countries, and possible factors are explained by health conditions, financial stress, family problems and social isolation (Kim et al., 2011). The meaning of financial support should be interpreted carefully across cultures. For instance, when loaning money is interpreted as problem-focused support in the Western countries, the exchange of instrumental support in some cultures encompasses the meaning of trust and interconnectedness between provider and recipient (Chen, Kim, Mojaverian, & Morling, 2012). There is evidence that providing concrete help, such as money, is associated with affection and care (emotional support) in Asian culture (Chen et al., 2012) and financial aid to parents can be more symbolic than instrumental in China (Bian, Logan, & Bian, 1998). Furthermore, there is evidence that the effects of types of support (instrumental and emotional) are different depending on the culture (Rodrigues, Gierveld, & Buz, 2014).

Generally, many older adults are in an inferior economic position after retirement. Most Korean older adults are still dependent on their children (Lee & Phillips, 2011; Oh, Kim, Martins, & Kim, 2006), and combined with a low fertility rate, the proportion of older adults is increasing each year. Nevertheless, Korea will have the highest level of dependency ratio among OECD countries in 2050 after Japan (Kim & Cook, 2011; Kinsella & Phillips, 2005; Korea Development Institute [KDI], 2013). In addition, the traditional Asian value of filial piety, which is to support elderly parents, has been reduced (Kim & Cook, 2011; Sung, 2001), which indicates the importance of exploring the financial resources of older individuals. Such phenomena highlight the importance of understanding available resources and promoting support behavior within the 65+ age group (intragenerational), especially when the needs of the older generation exceeds the amount of resources that can be provided by the younger generation (intergenerational).

1.7 Korea: A Laboratory for Ageing Research

This study will use the example of the Korean population because Korea is worth exploring for several reasons.

First, Korea is one of the fastest ageing countries in the world, and it is expected to show the highest level of dependency ratio among OECD countries in 2050 after Japan (KDI, 2011; Kim & Cook, 2011). In 2011, the proportion of Koreans age 65 and older reached 11.4% (Korea Statistical Information Service [KOSIS], 2012) and Korea is expected to become an “aged society (14% of the population 65+)” and “super-aged society (20% of the population 65+)” by 2019 and 2026 respectively (National Pension Service [NPS], 2012). It took 115 years in France, 40 years in Germany, 61 years in Italy, 24 years in Japan and 75 years in the US, but only 8 years in Korea to advance from the “aging society” to the “aged society” category. Such fast demographic changes is expected to impact the labor market, the financial

market, the national fiscal plan, and will lead to an increase in demands for the welfare and health care system (Moon, 2015).

As a result, Korea is already exhibiting negative outcomes due to population ageing; for instance, Korea has the highest rate of increase in suicide rate (Cheong et al., 2012). The high suicide rate has been already linked to the quickly ageing society, socioeconomic factors and cultural factors (Kim & Yoon, 2013). Furthermore, increasing financial pressure on the public sector due to demographic changes will make it more difficult for the country to provide enough support for older adults. In Korea, the Korean national pension system reserve fund will be depleted around 2047 (KDI, 2011).

Second, due to fast economic development after Korean War, improvements in the medical technology, nutrition and sanitary conditions eventually improved the health and life expectancy of the Korean people. However, because the social welfare system for the older population is not yet developed well enough, only a limited number of older adults can depend on the government (Kim & Cook, 2011; Park et al., 2012). For instance, the “Korean National Pension” started in 1988, the “Basic Old Age Pension” started in 2006 and the “Long Term Care Insurance” only started in 2008.

Third, the concept of filial piety, the Asian cultural duty of serving one’s parents, is diminishing. According to *social indicators in Korea 2011* (Statistics Korea, 2012), 89.9% of Koreans agreed that *a child must support parents* in 1998, but only 36.0% agreed in 2010. Koreans age 65 and older can no longer rely only on either the inter-generational support nor the government and therefore needs of using intra-generational support will increase in the foreseeable future, especially when baby boom cohorts (born between 1955-1963) start reaching the age of 65.

Hence, Korea can be seen as a laboratory for aging research, and one that may provide unique and complementary insights to the core of aging research conducted in Western societies. This dissertation will assess the implications for other East Asian countries where

similar cultural, historical and demographic background is shared. Moreover, this dissertation is expected to contribute to the field of studies on aging where the dominant focus is concentrated on developed countries.

CHAPTER 2: RESEARCH QUESTIONS

Due to decreasing fertility together with prolonged life expectancy, population aging has become an important global issue. The objective of this dissertation is to investigate the potential for promoting social support exchange behavior *within* the older adult generation (*intragenerational support potential*). Based on a conceptual framework of social support of older adults in a theoretical background section, three studies were conducted. The most important research questions of the dissertation are listed below:

(1) Study 1: How is Older Adults' Functioning in Later Life?

Study 1 is a longitudinal study to explore how older adults are functioning in later life in Korea. It investigates the social support potential among adults aged 65+, which is the basis for understanding social support exchange behavior in adults aged 65+. The existence of differential patterns and changes of social support potential among adults aged 65+ is investigated.

(2) Study 2: Is Potential Reflected in Actual Social Support Exchange?

Study 2 is a cross-sectional study to explore the relationship between the level of social support potential and social support exchange behavior (i.e., financial support) in Korean adults aged 65+. This is done to examine if social support behavior depends on the level of social support potential, and to investigate the moderating effect of objective and subjective social network characteristics on social support behavior.

(3) Study 3: Insight into Ways of Promoting Social Support Behavior

Study 3 is a qualitative study to explore the ways to actualize the existing social support potential of older adults in Korea. Study 3 looks for the facilitators and barriers that could promote individuals to exchange social support potential in Korea.

2.1 How is Older Adults' Functioning in Later Life?

Potential is defined as one's latent abilities that may be developed into something useful in the future (Merriam Webster, 2014). Notwithstanding, to provide or receive social support, it is critical to understand whether one has the minimal ability or resources regardless of one's willingness to provide such support. Therefore, here this study presents the term "support potential" as the minimum functional requirement of better actualizing the resource assuming the need for support can be indicated by functional impairments and low resource levels exists. Consequently, the purpose of this study is to describe the general characteristics and the functional status of Korean older adults over time with regard to key variables representing proxies for social support potential.

Conceptually, the levels of functioning are regarded as a support potential and this study focuses on the two domains of aid and affect as outlined by Antonucci (Antonucci et al., 2009) for two reasons. First, aid and affect are the most necessary support types that match with the general risks of the older adults and are of particular importance to many individuals aged 65+ (Cohen & Syme, 1985). Second, this study aims to provide a basis for international comparative studies. Hence, we focus on proxy variables of social support based on objective and internationally typically used measurements. We selected three measures to represent proxies of the potential to provide aid-related support (i.e., guidance, financial, and physical support) and one measure to capture the potential for affect-related support (i.e., emotional support).

As a result, in this first descriptive account, we regard social support potential as capacity and availability represented by selected key resources. This study will be analyzed in two parts—one at the population level and another at the individual level—in order to answer the following research questions:

Part 1: A population level analysis

The main goal of analyzing part 1 is to understand each type of social support needs and potentials among the 65 and older age group in Korea at two time period points during the years 2006 and 2008 at the population level.

Part 2: An individual level analysis

The main goal of analyzing part 2, which asks the same research questions that are in line with part 1, is to understand patterns of support potentials and needs changes at the same two time period points during the years 2006 and 2008 but at the individual level.

2.2 Is the Potential Reflected in Actual Social Support Exchange?

Increasingly, many studies explore possible factors predicting changes in functioning, e.g., health behavior on cognitive status, public support on financial resources, social network on depression, etc. (Lee et al., 2013; Park, Smith, & Dunkle, 2013). However, there are only few studies focusing on the domain of economic resource that also deal with financial transfer from children (Kim & Cook, 2011; Lee et al., 2013; Lee & Phillips, 2011). To date, some studies have discussed financial transfer at the intergenerational level; however, few studies include a wide range of resource indicators (e.g., functional health, social resources, and financial resources) that might enable researchers to approach the ageing issue from different aspects. Therefore, this study employs a perspective that focuses on the financial domain of social support and older adults as the main agent.

The present study aims to elucidate the financial support behavior of older adults with their adult children. We hypothesize that reciprocal behavior of financial support of older adults is not solely dependent on the amount of financial resources that people have, but that other types of resources available such as the level of functioning (e.g., cognitive status, physical health and emotional status), network characteristics with children or other economic status related factors may influence behavior. In addition, it is expected to describe the

influence of network characteristics with children on actual support behavior in modern Asian society with diminishing concept of filial piety.

As mentioned above, most researches are focused on Western countries. Korea has a strong potential to be a laboratory for ageing research in Asia because it will provide insights to other East Asian countries since Korea—the fastest ageing Asian country—shares similar cultural, historical and demographic backgrounds with those countries. Therefore, this study aims to explore the relation between financial resources and financial support behavior of Korean older adults and their level of cognitive, emotional, and health functioning and social network characteristics particularly regarding their adult children.

Following the evidence from the Study 1, this Study 2 was conducted to capture the relation of social support potential with actual social support behavior among adults 65+. The main motivation of the study is to find out (a) if social support behavior is related to the level of social support potential and social network characteristics and (b) the moderating effects of social network characteristics, i.e., relationship satisfaction with children on the relation between income and financial support exchange behavior in Korean adults aged 65+.

2.3 Insight into Ways of Promoting Social Support Behavior

Although there is an extensive amount of research on social support, the majority of studies have focused on the effect of receiving support among older adults (Kim, Hisata, Kai, & Lee, 2000), and many questions are still unanswered. Not being able to provide enough support for older adults is currently a huge concern—especially since the intergenerational support system in Korea is no longer a solution as the Asian culture's duty of serving one's parents is diminishing (Statistics Korea, 2012). There is a lack of studies that explore the potential of older adults and the possibilities of actualizing their potential in Asia.

Furthermore, individual and cultural characteristics must be taken into account since the basic concepts regarding social exchange theory, the process of social exchange and the meaning of

reciprocity, have not yet been clearly identified. Cropanzano and Mitchell (2005) argued that even though the norm of reciprocity is a generally accepted principle, it could vary depending on people and cultures.

Thus, the aim of this study was to gain insight into the facilitators and barriers for promoting social support exchange behavior within adults aged 65+ in Korea through the lens of experts in the field of gerontology. This study addressed one main research question: What factors in exchanging social support within adults aged 65+ in Korea are perceived as salient by experts? This study aimed to include emerging factors in a conceptual framework of the social support behavior in an Asian country.

CHAPTER 3: METHOD

This dissertation was conducted using quantitative and qualitative methods to gain insight into social support potential and support behavior among Korean older adults. The main focus of this dissertation is the two domains of social support, i.e., aid and affect with four subcategories of guidance support (MMSE), financial support (income), physical support (K-IADL), and emotional support (CES-D10). In addition, social network characteristics (i.e., relationship with children) were explored to examine the impact of filial piety in Korean society.

In this chapter, first, the Korean Longitudinal Study of Ageing (KLoSA) datasets were used to examine the social support potential (Study 1) and actual social support behavior (Study 2) of Koreans 65+. Second, experts from the field of gerontology were interviewed in depth and the potential facilitators for promoting support behavior of Koreans 65+ were explored (Study 3). By the end of the interviews, narrative data, that provided fruitful discussion with regard to actualizing social support behavior, was collected.

3.1 How is Older Adults' Functioning in Later Life?

3.1.1 Procedure and Participants

Data were from the KLoSA, a nationwide survey, which was conducted at two time points. The first measurement occasion (T1) took place in 2006, and the second measurement occasion (T2) in 2008. The initial sample at T1 of the KLoSA consists of 10,254 participants with a response rate of 89.2% and 8,688 participants at T2 were followed with a rate of 84.7% (H. Kim et al, 2011). The representative of Koreans aged 45 and older living in households were interviewed by trained interviewers using computer-assisted personal interviewing (CAPI) methods. For details regarding the interview method and design, see the KLoSA website or elsewhere (<http://www.klosa.re.kr>; Kim, H. Kim et al, 2011).

The present study focused on $N = 3,384$ adults aged 65+ who participated both at T1

and T2. The sample consists of 1,972 women (58.3%) and 1,412 men (41.7%). The average age of the sample was $M = 72.79$ years ($SD = 6.13$, range: 65–105 years) at baseline in 2006. This study used data for those who completed the 2-year follow-up survey. Furthermore, suspected measurement errors, distillation errors or data integration errors were all confirmed by exploratory data analysis and by KLoSA institution. More specifically, due to errors with the K-MMSE values of the KLoSA original dataset, which is provided on the website, a corrected version of the values—the author of this paper personally received them from the KLoSA institute in March 2013—was used for this study. Consequently, different numbers of participants were analyzed according to the types of social support: $N = 3,173$ for guidance support potential, $N = 2,612$ for financial support potential, $N = 3,383$ for physical support potential, and $N = 2,890$ for emotional support potential. The main characteristics of the participants are described in Table 3.

Table 3. *Main Characteristics of Participants at Time 1 (2006) and Time 2 (2008) of KLoSA*

	Time 1 (2006)	Time 2 (2008)
Socio-demographics	n (%)	n (%)
Age ($M \pm SD$)	72.79 \pm 6.13	74.79 \pm 6.13
Gender (% of female)	1972 (58.3)	1972 (58.3)
Education		
Below elementary school	2483 (73.4)	2482 (73.4)
Middle school	331 (9.8)	331 (9.8)
High school	393 (11.6)	393 (11.6)
Above college	176 (5.2)	177 (5.2)
Marital status		
Currently married or living with a partner	2155 (63.7)	2095 (61.9)
Separated	13 (0.4)	15 (0.4)
Divorced	27 (0.8)	27 (0.8)
Widowed or missing (dispersed family)	1182 (34.9)	1240 (36.6)
Never married	7 (0.2)	7 (0.2)
Subjective limitation of activities due to health		
Not at all	353 (10.4)	246 (7.3)
Not much	1325 (39.2)	1408 (41.6)
Some degree, very much	1706 (50.4)	1730 (51.1)

Note. For education variables, $N = 3,383$.

3.1.2 Measures

To measure and determine social support potential, this study used a conservative approach based on the conceptual rationale that with less impairment the support *potential* is higher. Such an assumption clearly represents the lowest estimate of support potential, as individuals without impairments are still likely to differ in available support potential beyond the absence of impairment. Therefore, across support domains, we divided the total sample into three groups of high, medium and low functioning individuals in order to capture, at a descriptive level, low-to-high levels of support potential. The same cut-points were used for both time points, and the rationale for the cut-points used across support potential proxy variables is described in the sections below.

Guidance support potential

In order to provide or receive guidance support (e.g., advice, information, suggestion and directives), one's capacity for cognitive function is an important factor to be considered. The Korean version of the Mini Mental Status Examination (K-MMSE) was used to measure cognitive ability as a proxy for guidance support potential of Korean older adults in this study. The MMSE is the most widely used screening instrument worldwide and can thus be used well in international comparative studies; in addition, the K-MMSE is the measurement instrument that most directly measures the status of cognitive functioning in the KLoSA dataset. The K-MMSE consists of 19 items with a maximum score of 30 points (Kim et al., 2012). However, MMSE has faced some criticism regarding the age and/or education biases, it has been reviewed by Cullen et al. (2007) and they concluded that there is no "one size fit" out of 39 cognitive impairment screening tests. In addition, with the KLoSA "K-MMSE index" original variable, the score is calculated and is placed into one of three categories: a score of 0-17 is 'severe cognitive impairment', 18-23 is 'mild cognitive impairment', and 24-30 is 'no cognitive impairment'. Meanwhile, the Alzheimer's association in Korea (2012) defines a score over 24 is considered as no impairment; a score between 20-23 as possible

dementia; and under 19 as mild and severe dementia.

Given a high degree of heterogeneity in cut-points used to define cognitively healthy individuals using the MMSE in Korea and other countries (Kim et al., 2012; Clark et al., 1999; Kukull et al., 1994; Han et al., 2008), this study used a conservative approach to divide the sample into three groups: (a) high potential, those who scored 30 points (*no cognitive impairment*); (b) medium potential, those who scored between 24 and 29 points; and (c) low potential, those who scored between 0 and 23 points. The scale demonstrated a good internal consistency at both time points (Cronbach's $\alpha = .82$).

Financial support potential

Financial status is of great importance to the older adults, in particular to the Asian older adults. Remarkably, Chen et al. (2012) argued that providing tangible resource is the way of showing one's trust and emotional support in some cultures, while it is a typical way of providing functional support in some other cultures.

The household equivalent income was used in the study to determine the available financial support potential. It is calculated as the total household income divided by the square root of the number of household members. The cut-point for division into the three support potential groups was selected based on the subjective minimum cost of living using the dataset from the Korean Retirement and Income Study (KReIS) 2007 (Korea Retirement and Income Study, 2012), since the KLoSA dataset does not provide such information directly. The cut-point for the low potential group of financial ability was set to 8,256,000 Korean Won (₩ or KRW). This amount represents the mean expected minimum cost of living provided by the participants of the KReIS, multiplied by 12 months. The cut-point for the medium support potential group was set as ₩12,060,000, which is the mean score of the optimal amount of expected expenses in later life indicated by KReIS participants, multiplied by 12 months. The cut-point for the high potential group was set to amounts over ₩12,060,001. Hence, the population was divided into three groups: (a) high potential, if the

amount of income was over ₩12,060,001; (b) medium potential, if the income was between ₩ 8,256,001 and ₩12,060,000; and (c) low potential, if the income was below ₩ 8,256,000.

Physical support potential

In order to receive or provide physical support, for instance, sick care or chores such as cooking or cleaning, whether or not one has a physical limitation should be considered. The K-IADL scale (Korean versions of the Instrumental Activities of Daily Living) was thus used as a proxy for physical support potential. The K-IADL scale consists of 10 items (personal grooming, doing household chores, preparing meals, doing the laundry, going outside without using transportation, going outside using transportation, shopping, managing money, using the telephone, taking medications) (Won, Roh, Sunwoo, & Lee, 2002). For each of the 10 items, there were three response options: (a) do not need help at all (one point); (b) need help to some degree (two points); and (c) need help in every aspect (three points).

Thus, lower scores in this measure represent better functional health. These responses to each of the 10 items were summed, and these sum scores were then categorized into the three support potential groups: (a) high potential, those who scored 10 points; (b) medium potential, those who scored between 11 and 20 points; and (c) low potential, those who scored between 21 and 30 points. The scale showed an excellent internal consistency with $\alpha = .95$ and $.96$, respectively).

Emotional support potential

In order to receive or provide emotional support, the level of depression is an important influential factor. The Korean version of the short form Center for Epidemiological Studies-Depression (K-CES-D10) scale was used to measure the emotional support potential. The 10 items are divided into two that are positively phrased and eight that are negatively phrased. The response for each item ranged from 1 (*very rarely or less than once a day*) to 4 (*almost always or 5-7 days during the past week*). From the summed scores of the 10 items, higher scores indicated greater distress. In the KLoSA dataset, scores of the CES-D10 index

variable over four points are defined as having depression. Although most previous studies using the CES-D10 measure define having depression when the score is over four points (Kim, et al., 2011), a score of 10 or higher out of 30 is also used as the cut-point for clinically significant depressive symptoms (Bradely, Bagnell, & Brannen, 2010).

Since the purpose of this study is not only to describe depressive symptoms in Korea, but also to observe the changing patterns in cases with non-depressed and highly depressed over time, therefore the categorization was defined by three groups: (a) high potential, if the participant scored 0 or 1; (b) medium potential, if the participant scored between 2 and 9; and (c) low potential, if the participant scored between 10 and 30. As a consequence, the higher score represents the higher depressive symptoms. Internal consistencies of the scale at both points were good (Cronbach's $\alpha = .84$, and $.85$ respectively).

3.1.3 Data Analysis

First, descriptive statistics were performed to obtain characteristics of the study sample and to check the minimal potential of each type of social support. The frequencies and proportions of the population were calculated based on the cut-points defined within this study, which were high, medium, and low potential groups for each social support type. Second, a paired-samples *t*-test was conducted to compare the score of each social support potential measure in T1 and T2. McNemar's test was used to obtain figures for different developmental changes within individuals in each potential group and to test the probability of social support potential changing over time. All effects with $p < .05$ were considered to be statistically significant. All data analyses were performed with SPSS Statistics version 20.0.

3.2 Is the Potential Reflected in Actual Social Support Exchange?

3.2.1 Procedure and Participants

The data for this study were obtained from the KLoSA (Korean Labor Institute [KLI], 2007). KLoSA is an ongoing nationwide longitudinal panel survey of a nationally representative sample of community dwelling adults aged 45 years or older who were alive at the time of the baseline interview in 2006. The initial sample at T1 of the KLoSA consists of 10,254 participants with a response rate of 89.2%.

The present study focused on adults aged 65+ who participated 2006 baseline interview data. Of 3,384 respondents aged 65+ in the dataset, we used data for those who completed all our questions. Thus, a nationally representative sample of 1,162 female (57.8%) and 848 male (42.2%) was included in our analysis ($N = 2010$). The average age of the sample was 72.79 years ($SD = 6.13$, range: 65–105 years) at baseline in 2006.

3.2.2 Measures

Dependent variable: Financial support behavior as outcome

In KLoSA, participants were separately asked two questions: whether they have provided or received regular or irregular financial support from up to 10 children. After the initial analysis, we found only a small number of participants answered that they provided financial support without receiving any in return. Moreover, in order to focus on reciprocal behavior, which is the aim of this study, financial support behavior was assessed separately; more specifically, financial support behavior was divided into four categories: ‘both provided and received’ ($n = 177$), ‘neither provided nor received’ ($n = 1012$), ‘received only’ ($n = 2161$), and ‘provided only’ ($n = 34$), either regularly or irregularly to/from at least one child older than 45.

Level of functioning of older adults

The level of functioning was measured at T1 using three objective measurements in the support domains of aid, i.e., guidance and physical support (cognitive health and physical health) and affect, i.e., emotional support (emotional health) that were available in KLoSA. It was also taken into consideration that measurements, which can estimate the available support potential beyond the absence of impairment, are currently not available.

First, *cognitive health* was measured using the Korean version of the Mini Mental Status Examination (K-MMSE). The K-MMSE consists of 19 items with a maximum score of 30 points (Kim, et al., 2012). A higher score, i.e., close to 30, represents better cognitive health. Second, *physical health* was measured using the Korean version of the Instrumental Activities of Daily Living (K-IADL), which consists of 10 items. For each of the 10 items, there were three response options: (a) do not need help at all (one point); (b) need help to some degree (two points); and (c) need help in every aspect (three points) and a lower score, i.e., close to 10, represents better functional health. However, we recoded this, so that a higher score, i.e., close to 20, represents better functional health in this study. Third, *emotional health* was measured using the Korean version of the Center for Epidemiological Studies-Depression (K-CES-D10) scale (Kim et al., 2011). The 10 items are divided into two that are positively phrased and eight that are negatively phrased. The response for each item ranged from 1 (very rarely or less than once a day) to 4 (almost always or 5-7 days during the past week). From the summed scores of the 10 items, higher scores, i.e., a score of 29, indicates greater distress. However, we recoded this, so a higher score, i.e., close to 29, represents better emotional health in this study.

Relationship with children: Impact of filial piety

Objective social network characteristics at T1 were measured with two items, i.e., proximity with children and frequency of contact with children via phone, mail or email. First, *Physical proximity* with children was asked separately for up to 10 children and we categorized it into four groups: if participants have at least one child living within 30 minutes, within 1 hour, within 2 hours and more than 2 hours by public transportation. Second, *frequency of contact with children* was assessed by asking participants how often they contact their children. The question was asked separately for up to 10 children with 10 options to choose from – 1 (almost every day) to 10 (never). We categorized the responses into four groups: participants that contact at least one child during a week, a month, a year, or almost never or never. Third, *subjective network characteristics with children* at T1 were measured by asking the level of relationship satisfaction with children. The item was rated on a 100-point scale with higher scores indicating higher satisfaction.

Socio-demographic characteristics

To assess the relationship between level of resources (or social support potential) and financial support behavior, we considered possible covariates, such as age in 1-year intervals, gender, marital status and level of education at T1. *Gender* was coded as 0 (female) or 1 (male). *Marital status* was coded as 0 (single) or 1 (married). *Level of education* was coded as 0 (below middle school) or 1 (above middle school). *Financial status* was measured using the household equivalent income. It is calculated as the total household income divided by the square root of the number of household members. *Working status* was coded as 0 (if currently not working) or 1 (if currently working).

3.2.3 Data Analysis

Financial support behavior was divided into four categories: ‘reciprocal (both provided and received)’, ‘no exchange (neither provided nor received)’, ‘received only’, and ‘provided

only'. Because of the distribution of household equivalent income was positively skewed, the measurement for income was log-transformed to improve normality. Bivariate correlations and VIF (variance inflation factors) were calculated to examine the relationships between independent variables and to check multicollinearity. Because of collinearity among the relationship with children variables, i.e., proximity with children, frequency of seeing children in person, and frequency of contact children via email, mail or phone based on bivariate correlations analysis, we excluded the variable 'frequency of seeing children' in this analysis. Furthermore, suspected measurement errors, distillation errors or data integration errors were all confirmed by exploratory data analysis and by KLoSA institution. More specifically, due to errors with the K-MMSE values of the KLoSA original dataset, which is provided on the website, a corrected version of the values—the author of this study personally received them from the KLoSA institute in March 2013—was used for this study. All data analyses were conducted with SPSS Statistics version 20.0.

For the analysis, descriptive statistics were used to characterize the study population and *P*-values for differences in proportions or means by financial support behavior were calculated using chi-square test or one-way Analysis of Variable (ANOVA). In order to identify which characteristics independently predicted differences between the subgroups of financial support behavior, step-wise multinomial logistic regression with the no exchange financial support behavior (i.e., neither received nor provided financial support) as reference was performed in several stages. Furthermore, we examined the moderating effects of relationship with children i.e., relationship satisfaction with children on the relationship between income and financial support behavior. Definition of variables analyzed in this study is described below (Table 4).

Table 4. *Definition of Variables*

	Variables	Measures
DV	Financial support behavior	(1) Both received and provided (2) Neither received nor provided (3) Received only (4) Provided only
Control Variables	Age	65+, 1-year intervals
	Gender	(0) Female (1) Male
	Marital status	(0) Single (1) Married
	Education	(0) Elementary school (1) Above middle school
	Income (logged)	0~10 *10: High income
	Working status	(0) Not working (1) Currently working
Psycho-Physical Resources	Cognitive health (K-MMSE)	0~30 *30: High functioning
	Physical health (K-IADL)	0~20 *20: High functioning
	Emotional health (K-CES-D10)	0~29 *29: High functioning
Social Network Characteristics (with children)	Proximity with Children	(1) Within 30 minutes distance (2) Within 1hr distance (3) Within 2hrs distances (4) More than 2hrs distances
	Contact children (via email, phone, mail)	(1) Weekly (2) Monthly (3) Yearly (4) Never
	Relationship satisfaction with children	0~100 *100: High satisfaction

3.3 Insight into Ways of Promoting Social Support Behavior

3.3.1 Participants and Design

The aim of the study was to understand the factors that are possible facilitators and barriers for exchanging social support within the 65+ age group in Korea; this study used a qualitative research approach to answer the research questions. Because the topic of exchanging of social support at the intragenerational level is still under-researched in Korea, the author identified experts through various contacts throughout the country and interviewed a purposive sample of six. The selected experts had expertise in the field of gerontology,

understood Korean culture, had practical experiences with Koreans over the age of 65 and were able and willing to share their knowledge in the interest of the study.

3.3.2 Interview Process

After the initial contact by email, an appointment was scheduled and the interview was conducted in each expert's quiet office room in September 2014 using the Korean language. The average duration of the interview was 56 minutes (range = 30 minutes to 104 minutes). Participants' demographic information was collected at the end of the interview, including level of education, current position and working experience in the field of gerontology. Recorded audio files of the interview were transcribed verbatim for analysis.

Participants were asked a series of open-ended questions related to social support behavior among Korean older adults aged 65+. The interviews were conducted based on a protocol made for this study, which used a quintamensional design (Gallup, 1947). Experts were asked several questions related to the following topics: (1) experts' perspectives on possibilities of exchanging social support within the 65+ age group in Korea; (2) experts' perspectives on the functioning of Korean older adults based on their experience in the field; (3) experts' observation on the changes in Korean culture and the status of the ageing issue in Korea, at least during the last 10 years; (4) experts' observation with regard to individual differences in support behavior in a real life.

The interviews followed the interview guide (Checkliste für die Selbstbeurteilung von Studien auf ethische Unbedenklichkeit) provided by the ethics committee of the psychology department at the University of Zurich (Ethikkommission, Philosophische Fakultät, Universität Zürich). Confidentiality was guaranteed. All experts gave informed consent with the understanding that the data would be recorded, transcribed, and processed anonymously with the possibility of using it publically (e.g., publication or presentation).

3.3.3 Data Analysis

The aim of the interviews was to gain insight into the professional experience and knowledge of the experts on possibilities of exchanging social support within the 65+ age group. The analyses were performed using MAXQDA (VERBI software, Berlin), a software package for managing and analyzing qualitative research data. The analyzed processes involved multiple phases largely based on recommendations for qualitative research (Pope, Ziebland, & Mays, 2000).

Prior to the analyses, the author read the transcripts thoroughly multiple times, in order to become familiar with the data and to have a complete understanding of the information provided by the experts. Then, to get a feeling of the experts' view about each specific topic, the author worked through the interviews in a deductive way using the primary topic list. Then, in order to include key issues and aspects from the experts more broadly, the analyses continued in an inductive way. Coding and constant comparisons were made between codes and transcripts to build more comprehensive categories and themes (i.e., mutually exclusive and exhaustive themes) during the whole process. A thematic coding framework was developed and recurrent themes within the transcripts were identified and sorted. Finally, the author mapped and interpreted the results based on the framework in order to find associations between themes.

CHAPTER 4: RESULTS

In Study 1, the changes of social support potential in Koreans 65+ and in Study 2, the relationship between available resources and actual social support behavior using the Korean Longitudinal Study of Ageing datasets were examined. In the following step (Study 3), qualitative interviews were conducted with experts based on a quintamensional design to explore the specific context of facilitators and barriers when actualizing social support potential of Koreans 65+. The findings of each study will be presented in this chapter.

4.1 How is Older Adults' Functioning in Later Life?

Descriptive information on all four social support potential indicators for both time points is shown in Table 5. In the following, we describe the availability of potential by observing the level of functioning changes over time, both on the population-level and in terms of individual differences for each support potential domain.

Table 5. *General Sample Characteristics in Key Indicators of Social Support Potential*

Potential types	Measure	Time 1 (2006)	Time 2 (2008)	<i>df</i>	<i>t</i>	95% CI
		<i>M</i> ± <i>SD</i>	<i>M</i> ± <i>SD</i>			
Guidance	K-MMSE	22.32 ±5.80	21.77 ±6.00	3172	6.51	[0.38, 0.71]
Financial	Income	₩759 ±928	₩972 ±1,036	2611	-10.28	[-254.19, -172.75]
Physical	K-IADL	11.34 ±3.54	11.60 ±4.13	3382	-4.21	[-0.37, -0.14]
Emotional	K-CES-D10	8.86 ±5.18	10.24 ±5.65	2889	-12.73	[-1.59, -1.16]

Note. The income is presented in thousand of Korean won (₩), unit as ten thousand; K-MMSE (0-30; the highest score indicates no cognitive impairment); Income (low potential if below ₩8,256,000, high potential if above ₩12,060,001); K-IADL (10-30; the lowest score indicates no physical functional limitation), K-CES-D10 (0-30, the lowest score indicates no depressive symptoms); CI = confidence interval of the difference; All significant ($p < .001$).

4.1.1 Guidance Support Potential: K-MMSE

Population-level analyses

There was a difference in the average scores on the K-MMSE measure indicating mean-level changes over time. Scores on the K-MMSE scale at T1 ($M = 22.32$, $SD = 5.80$) were higher than scores at T2 ($M = 21.77$, $SD = 6.00$); $t(3172) = 6.51$, $p < .001$, 95% CI [0.38, 0.71], $d = 0.2$. Most of the participants belonged to the medium or the low potential group (50.6% and 48.6% at T1, respectively) and less than 1% of the people belonged to the high potential group at both time points. Using McNemar's test (see Figure 1), the number of cases in both the high and the medium potential groups decreased ($p < .01$ and $p < .001$, respectively), while the number of cases in the low potential group increased ($p < .001$).

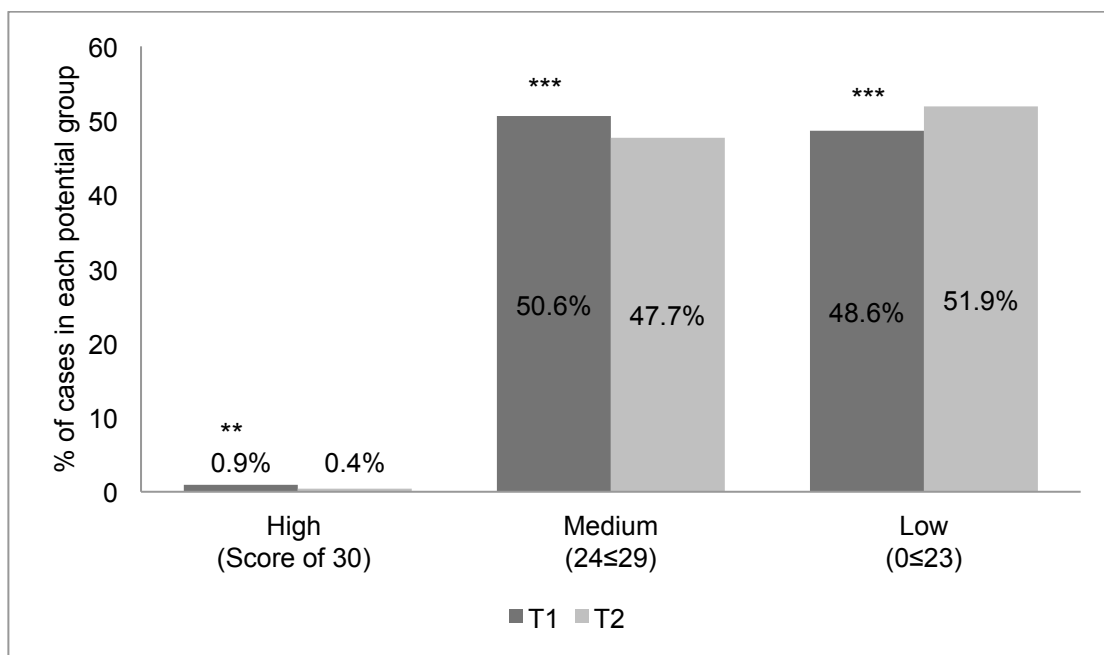


Figure 1. Population-level means in cognitive functioning as an indicator of guidance support potential at T1 and T2.

Note. $N = 3,173$; McNemar's test; * $p < .05$; ** $p < .01$; *** $p < .001$.

Individual-difference analyses

Using McNemar's test (see Figure 2), from 28 cases in the high guidance potential group at T1, no case maintained their status after two years. Instead, from within this group, the individuals moved down to either the medium or the low potential group ($p < .001$).

Moreover, the majority of cases starting out in the medium and the low potential group remained in the same potential group over time as indicated by the bold solid arrows in Figure 2 ($p < .01$ and $p < .001$, respectively).

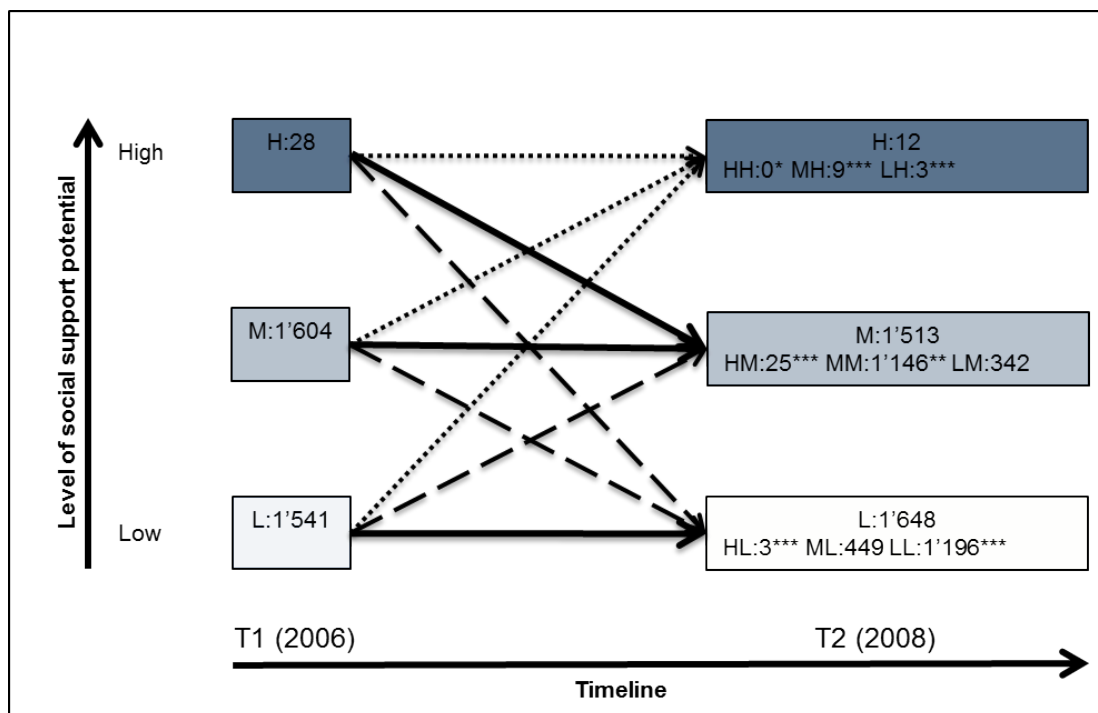


Figure 2. Frequencies of individual differences in level and change in cognitive functioning (guidance support potential) from T1 to T2.

Note. The first letter indicates the level of functioning at T1 and the second letter indicates the level of functioning at T2; H = high, M = medium, L = low; Numbers reflect the frequency of cases in the high, medium and low functioning groups or moving from one group to another (e.g., “MH: 9” means a total of 9 cases moved from the medium potential group at T1 to the high potential group at T2). The different types of arrows indicate differences in the frequencies of cases moving from the respective T1-group to T2-group. The bold solid arrow indicates movement direction for the majority of cases, followed by the dashed line and the dotted line to indicate the intermediate and the lowest frequencies; $N = 3,173$; McNemar’s test; * $p < .05$; ** $p < .01$; *** $p < .001$

However, a different pattern of group membership change was observed for some individual persons. That is, 12 cases (0.4%) in the high potential group at T2 were from either the medium or the low potential group. Specifically, nine cases in the medium potential group and three cases in the low potential group of T1 moved to the high potential group after two years by showing increased level of cognitive functioning ($p < .001$).

4.1.2 Financial Support Potential: Income

Population-level analyses

There was a difference in the average income (Korean won; ₩) indicating mean-level increase from T1 ($M = 7,588,588$, $SD = 92,757,964$) to T2 ($M = 9,723,315$, $SD = 103,638,656$); $t(2611) = -10.28$, $p < .001$, 95% CI $[-254.19, -172.75]$, $d = -0.4$. Less than 30% of the sample population at both time points falls into the high potential group and more than half of the participants belonged to the low potential group. However, using McNemar's test (see Figure 3), the number of cases in the high potential group increased ($p < .001$) together with the medium potential groups ($p < .01$), while the number of cases in the low potential group decreased ($p < .001$).

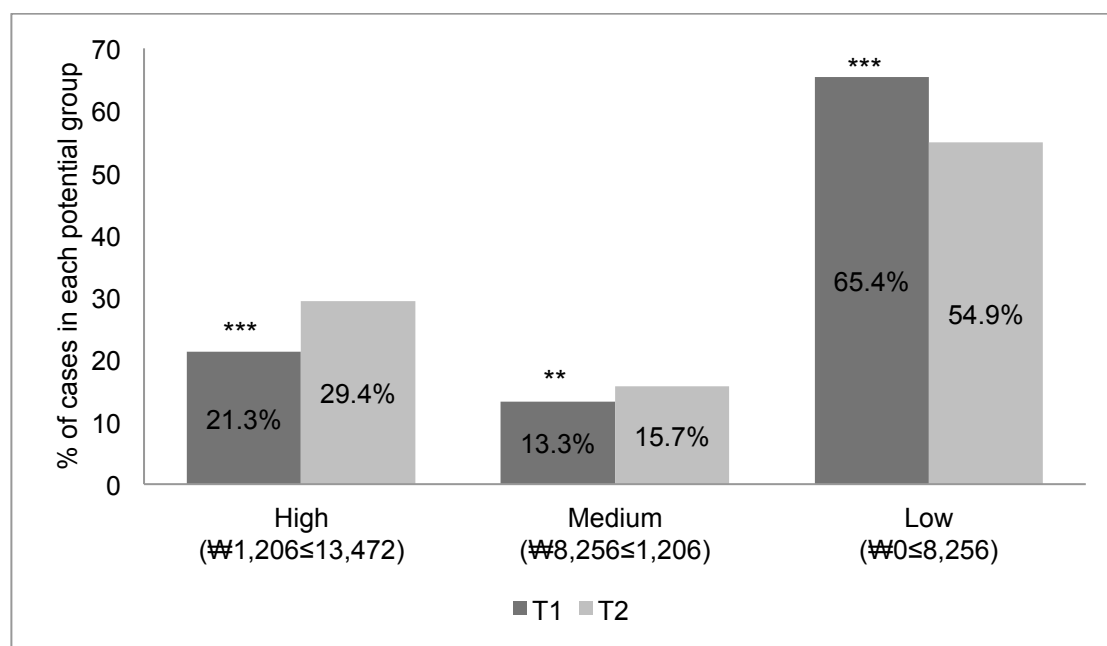


Figure 3. Population-level means in income as an indicator of financial support potential at T1 and T2.

Note. $N = 2,612$; McNemar's test; * $p < .05$; ** $p < .01$; *** $p < .001$.

Individual-difference analyses

Using McNemar's test (see Figure 4), a significant tendency was found for cases in each potential group to maintain their potential over time as indicated by the bold solid arrows

in Figure 4 ($p < .001$). Furthermore, some cases in the high and medium potential groups moved down to the lower potential group over time ($p < .001$).

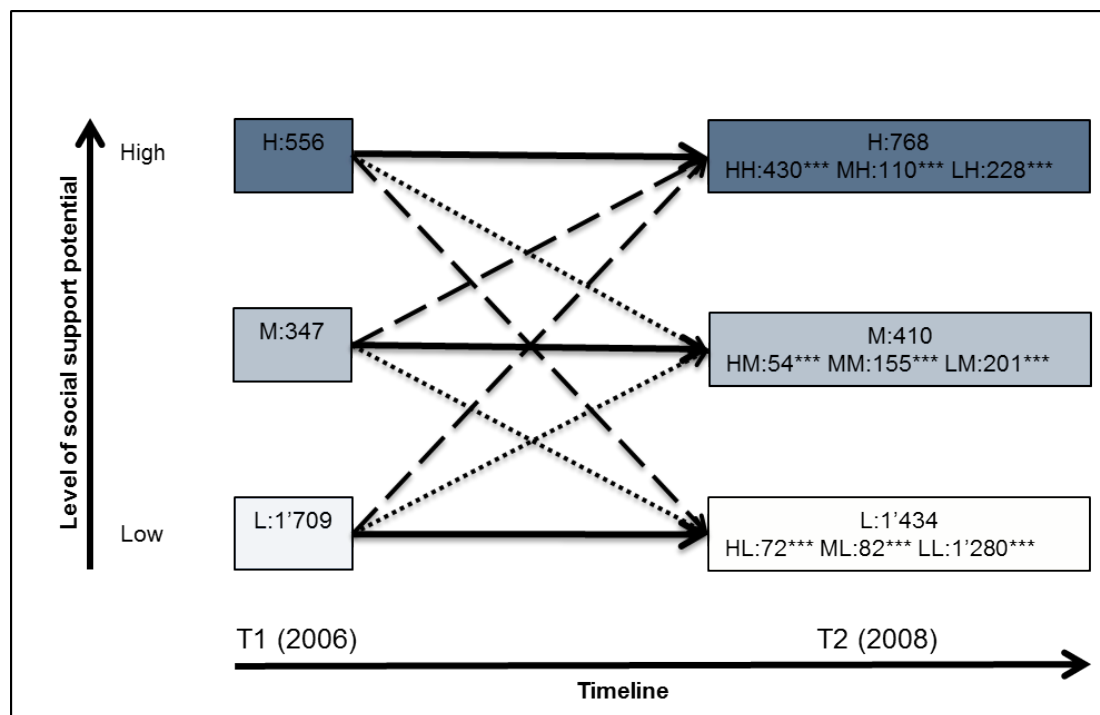


Figure 4. Frequencies of individual differences in level and change in income (financial support potential) from T1 to T2.

Note. The first letter indicates the level of functioning at T1 and the second letter indicates the level of functioning at T2; H = high, M = medium, L = low; Numbers reflect the frequency of cases in the high, medium and low functioning groups or moving from one group to another (e.g. “MH: 110” means a total of 110 cases moved from the medium potential group at T1 to the high potential group at T2). The different types of arrows indicate differences in the frequencies of cases moving from the respective T1-group to T2-group. The bold solid arrow indicates movement direction for the majority of cases, followed by the dashed line and the dotted line to indicate the intermediate and the lowest frequencies; $N = 2,612$; McNemar’s test; * $p < .05$; ** $p < .01$; *** $p < .001$.

However, individual differences were also observed with the income measure. Among 556 cases in the high financial potential group at T1, 126 cases (22.7%) failed to maintain the same level of potential. However, 430 cases (77.3%) stayed in the same group over time ($p < .001$). Moreover, some cases in both the medium and the low potential group moved up to the higher potential group after two years ($p < .001$). More specifically, 110 cases (31.7%)

from the medium potential group at T1 and 228 cases (13.3%) of the low potential group at T1 showed improved level of financial support potential over time ($p < .001$).

4.1.3 Physical Support Potential: K-IADL

Population-level analyses

There was a significant difference in the average score on the K-IADL measure indicating mean-level decrease in functional health from T1 ($M = 11.34$, $SD = 3.54$) to T2 ($M = 11.60$, $SD = 4.13$); $t(3382) = -4.21$, $p < .001$, 95% CI $[-0.37, -0.14]$, $d = -0.2$. More than 75% of the sample population belonged to the high potential group and around 5% of people showed low potential at both time points. The number of cases in the medium potential group decreased ($p < .01$), while the number of cases in the low potential group increased over time ($p < .001$) (Figure 5).

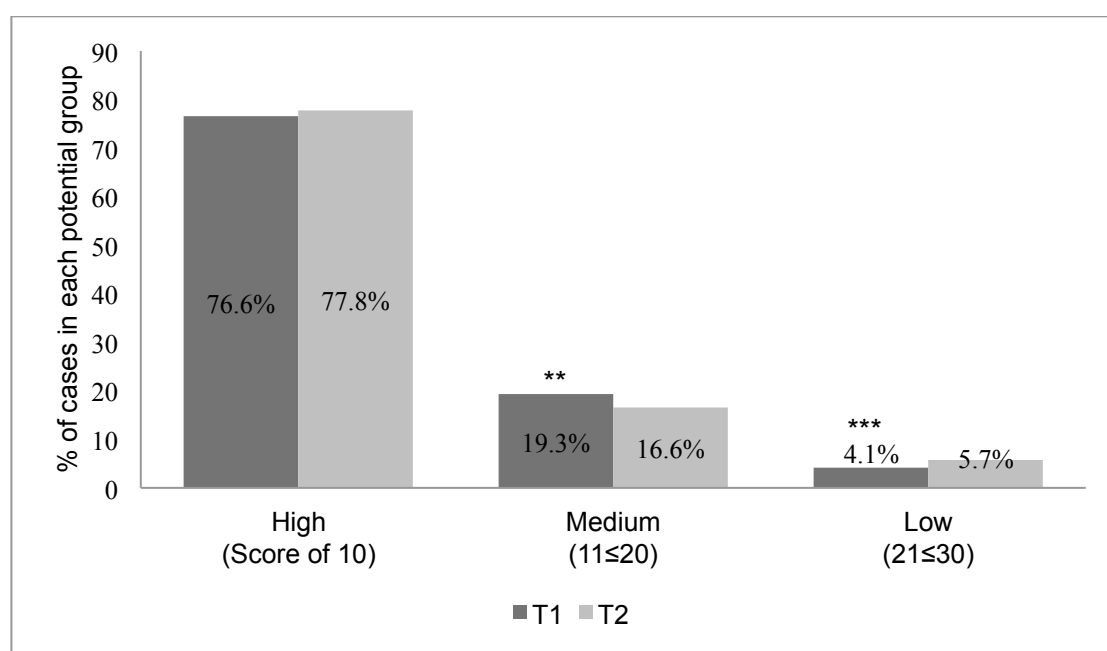


Figure 5. Population-level means in functional health as an indicator of physical support potential at T1 and T2.

Note. $N = 3,383$; McNemar's test; * $p < .05$; ** $p < .01$; *** $p < .001$.

Individual-difference analyses

Using McNemar's test (see Figure 6), the majority of cases in the low potential group stayed in the same group as indicated by the bold solid arrow in Figure 6 ($p < .001$). Although the majority showed high physical potential over time (2,267 cases; 87.5%), still some cases in the high potential group moved down to the lower level of potential group as indicated by the dashed and the dotted arrows in Figure 6 ($p < .001$). More specifically, a total of 324 cases (12.5%) in the high potential group at T1 showed decreased level of physical functioning.

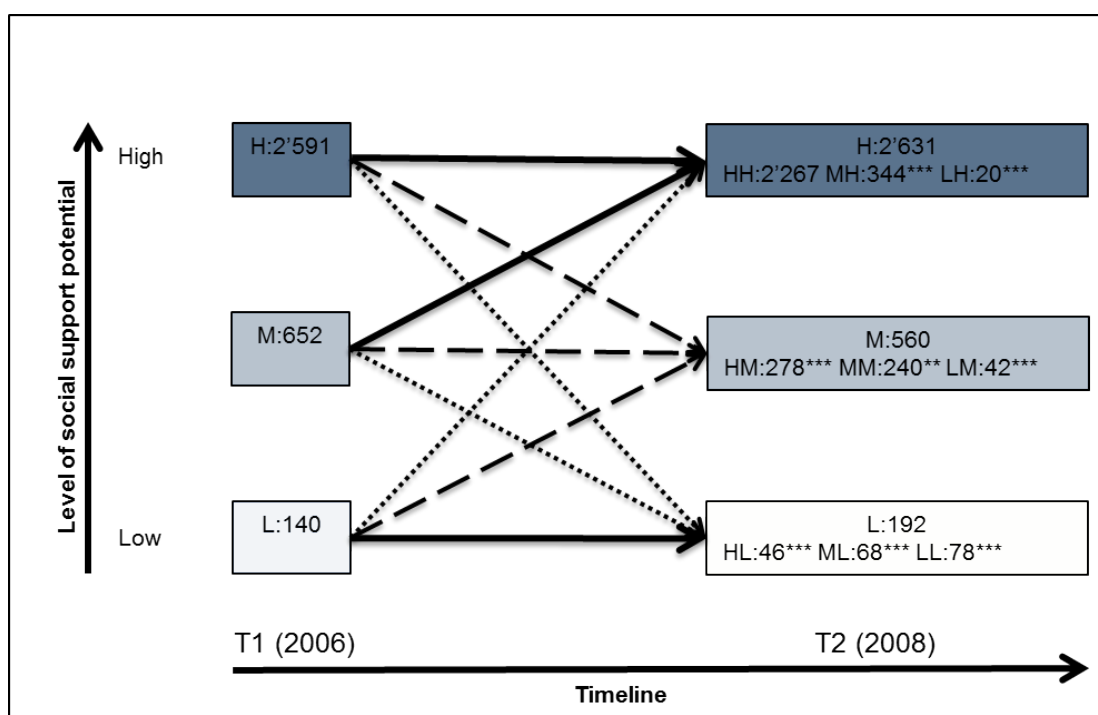


Figure 6. Frequencies of individual differences in level and change in functional health (physical support potential) from T1 to T2.

Note. The first letter indicates the level of functioning at T1 and the second letter indicates the level of functioning at T2; H = high, M = medium, L = low; Numbers reflect the frequency of cases in the high, medium and low functioning groups or moving from one group to another (e.g. “MH: 344” means a total of 344 cases moved from the medium potential group at T1 to the high potential group at T2). The different types of arrows indicate differences in the frequencies of cases moving from the respective T1-group to T2-group. The bold solid arrow indicates movement direction for the majority of cases, followed by the dashed line and the dotted line to indicate the intermediate and the lowest frequencies; $N = 3,383$; McNemar's test; * $p < .05$; ** $p < .01$; *** $p < .001$.

On the contrary, 344 cases (52.8%) in the medium potential group at T1 and 20 cases (14.3%) in the low potential group at T1 showed an increased level of physical functioning and moved up to the high potential group after two years ($p < .001$, respectively).

4.1.4 Emotional Support Potential: K-CES-D10

Population-level analyses

There was a difference in the average score on the K-CES-D10 measure indicating mean-level decrease in emotional health from T1 ($M = 8.86$, $SD = 5.18$) to T2 ($M = 10.24$, $SD = 5.65$); $t(2889) = -12.73$, $p < .001$, 95% CI $[-1.59, -1.16]$, $d = -0.5$. It should be noted that with the emotional status of the sample population, there were no cases that felt *depressed very rarely or less than once a day* with all of the ten items at both time points. The number of cases in the medium potential group decreased, while the number of cases in the low potential group increased ($p < .001$, respectively) (see Figure 7).

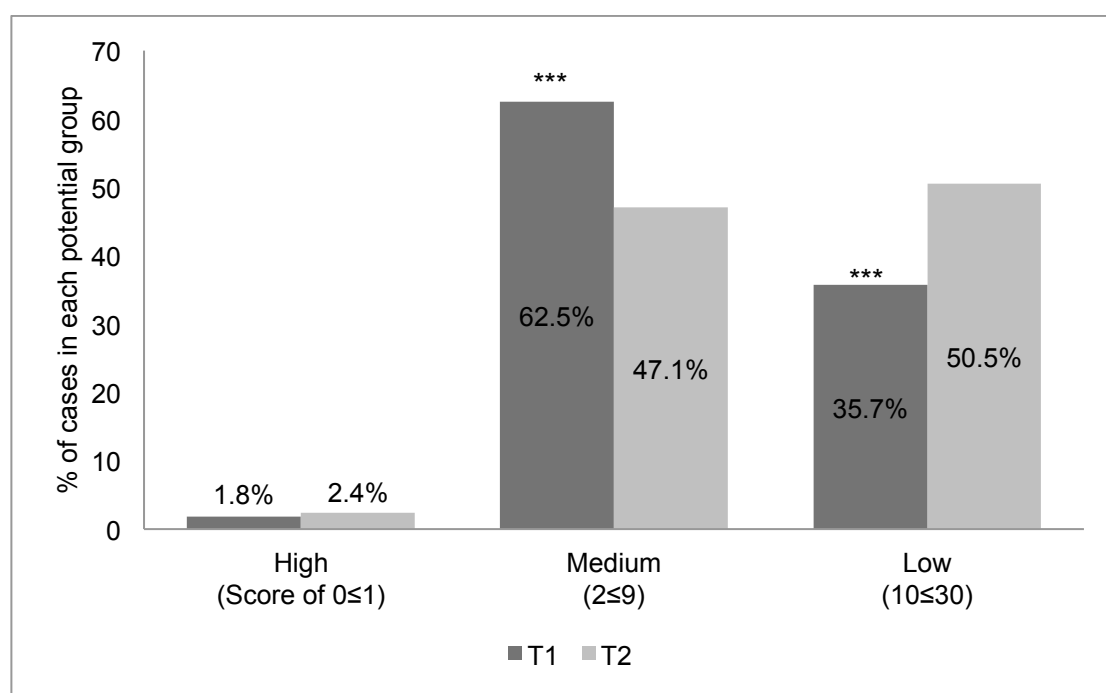


Figure 7. Population-level means in depressive symptoms as an indicator of emotional support potential at T1 and T2.

Note. $N = 2,890$; McNemar's test; * $p < .05$; ** $p < .01$; *** $p < .001$

Individual-difference analyses

Using McNemar's test (see Figure 8), the majority of cases in the high potential group moved down to the medium potential group ($p < .001$), while the majority of cases in both the medium and the low potential group stayed in the same group as indicated by the bold solid arrows in Figure 8 ($p < .01$ and $p < .001$, respectively).

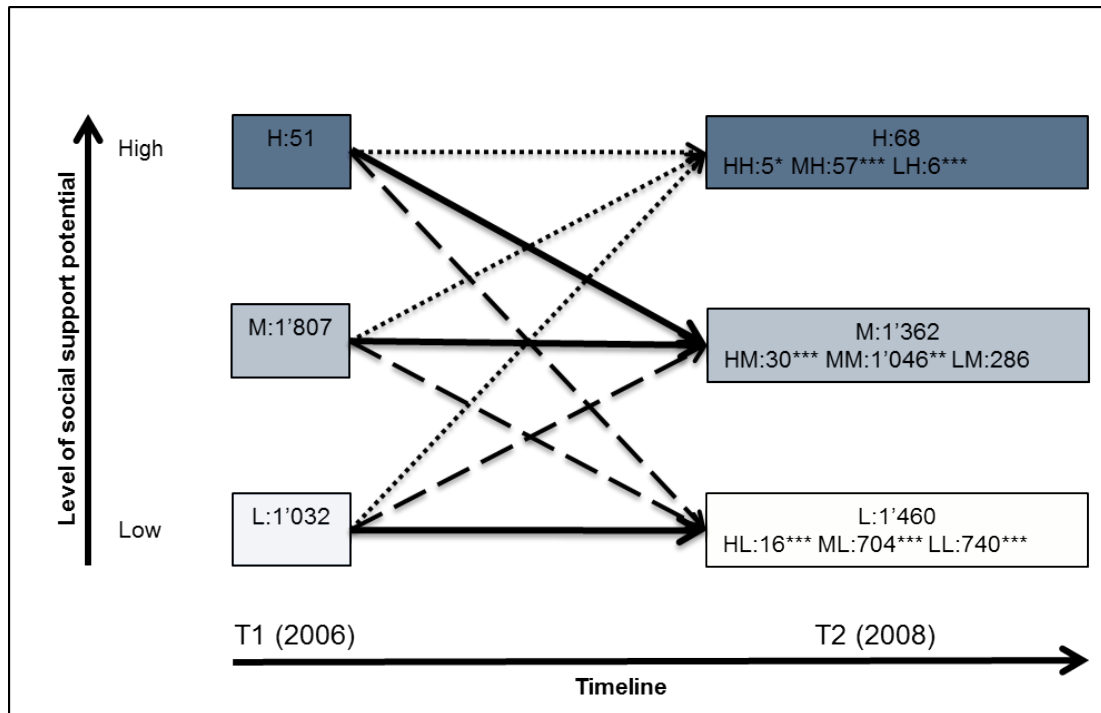


Figure 8. Frequencies of individual difference in level and change in depressive symptoms (emotional support potential) from T1 to T2.

Note. The first letter indicates the level of functioning at T1 and the second letter indicates the level of functioning at T2; H = high, M = medium, L = low; Numbers reflect the frequency of cases in the high, medium and low functioning groups or moving from one group to another (e.g. “MH: 57” means a total of 57 cases moved from the medium potential group at T1 to the high potential group at T2). The different types of arrows indicate differences in the frequencies of cases moving from the respective T1-group to T2-group. The bold solid arrow indicates movement direction for the majority of cases, followed by the dashed line and the dotted line to indicate the intermediate and the lowest frequencies; $N = 2,890$; McNemar's test; * $p < .05$; ** $p < .01$; *** $p < .001$.

Although only five cases (9.8%) at T1 maintained high level of emotional support potential, cases with improved level of potential were also observed. Specifically, 57 cases (3.2%) in the medium potential group at T1 and six cases (0.6%) in the low potential group at

T1 moved up to the high potential group after two years ($p < .001$). Moreover, 286 cases (27.7%) in the low potential group showed better level of emotional support potential and moved up to the medium potential group ($p < .001$).

4.2 Is the Potential Reflected in Actual Social Support Exchange?

4.2.1 Sample characteristics

Among 3,384 older adults between ages of 65 and 105 included in the total sample, significant gender differences were found on financial support behavior, $\chi^2(3) = 8.80, p < .05$. Male adults showed more reciprocal behavior compared to female adults. There was a significant difference with regard to marital status, $\chi^2(3) = 36.63, p < .001$. Married older adults showed more reciprocal behavior compared to single older adults, whereas single older adults showed less exchange behavior. With the level of education, older adults with a higher level of education (i.e., above middle school) showed more reciprocal behavior and they also showed more no exchange behavior compared to older adults with a lower level of education (i.e., elementary school), $\chi^2(3) = 21.50, p < .001$. Older adults who worked showed more reciprocal behavior compared to those who did not work, $\chi^2(3) = 31.71, p < .001$. Level of income was significantly different across subgroups, $F(435, 2176) = 1.27, p < .001$. In the sample, age was not significantly different across subgroups.

Table 6. *Socio-Demographic Characteristics of Participants by Financial Support Behavior*

	Reciprocal		Non-Reciprocal			χ^2 or <i>F</i>
	Both received and provided (n=177)	Neither received nor provided (n=1012)	Received only (n=2161)	Provided only (n=34)	Total (N = 3384)	
	<i>n</i> (%) or <i>M</i> ± <i>SD</i>	<i>n</i> (%) or <i>M</i> ± <i>SD</i>	<i>n</i> (%) or <i>M</i> ± <i>SD</i>	<i>n</i> (%) or <i>M</i> ± <i>SD</i>	<i>n</i> (%) or <i>M</i> ± <i>SD</i>	
Age	71.15±5.38	72.78±6.27	72.98±6.10	69.71±4.79	72.79±6.13	1.23
Gender						8.80 *
Male	87 (6.2)	410 (29.0)	895 (63.4)	20 (1.4)	1412 (100)	
Female	90 (4.6)	602 (30.5)	1266 (64.2)	14 (0.7)	1972 (100)	
Marital status						36.63 ***
Single	44 (3.6)	435 (35.4)	743 (60.5)	7 (0.6)	1229 (100)	
Married	133 (6.2)	577 (26.8)	1418 (65.8)	27 (1.3)	2155 (100)	
Education						21.50 ***
Elementary school	110 (4.4)	729 (29.4)	1625 (65.4)	19 (0.8)	2483 (100)	
Above middle school	67 (7.4)	283 (31.4)	535 (59.4)	15 (1.7)	900 (100)	
Income (logged)	6.19±1.36	6.01±1.33	5.86±1.40	6.45±1.45	5.93±1.38	1.27 ***
Working status						31.71 ***
Working	52 (8.9)	162 (27.8)	354 (60.7)	15 (2.6)	583 (100)	
Not working	125 (4.5)	850 (30.3)	1807 (64.5)	19 (0.7)	2801 (100)	

Note. **p* < .05; ***p* < .01; ****p* < .001.

4.2.2 Characteristics that Distinguish No Financial Exchange Behavior from Financial Support Exchange, Received Only and Provided Only Behavior

Stepwise multinomial logistic regression analysis was performed using 4 steps and 13 measures to test the factors that may influence financial support behavior in Korean older adults. The result of the last (the fourth) multinomial logistic regression model is presented in Table 7. The first regression was performed to identify the characteristics that differentiated the four subgroups of financial support behavior (exchanged, no exchanged, received only, and provided only) using no exchanged as the reference group. The second regression explored differences in psycho-physical resources among the four subgroups of financial support behavior, controlling for socio-demographic characteristics. The third regression

explored differences in social network characteristics with children among the four subgroups of financial support behavior, controlling for socio-demographic characteristics and psycho-physical resources. In the final step, we added one two-way interaction effects, i.e., relationship satisfaction with children \times log (income).

The results of the final logistic regression model show that after controlling for characteristics of older adults, only working status was negatively associated with exchange behavior. Specifically, as participants do not work, odds of reciprocal behavior decreased (OR = 0.58, $p < .05$). Except the working status, there was no significant association of socio-demographic characteristics with support exchanged, received only and provided only group compared to those who did not exchange financial support at all.

With regard to psycho-physical resources, physical health was positively associated with reciprocal behavior. More specifically, as participants perform better in physical health, odds of reciprocal behavior increased (OR = 1.32, $p < .05$) compared to those who did not exchange at all.

There were two measures associated with financial support behavior in the domain of social network characteristics with children. First, frequency of contact with children was significantly associated with reciprocal behavior and received only behavior. Specifically, as participants contact their children more often, odds of reciprocal behavior and received only behavior increased (OR = 0.47, $p < .001$ and OR = 0.66, respectively) compared to those who almost never or never contact their children. Second, relationship satisfaction with children was associated with received only behavior; the higher the level of relationship satisfaction with children, the higher the likelihood of received only behavior (OR = 1.03, $p < .01$).

The next analysis assessed the moderating effects of relationship with children, i.e., relationship satisfaction with children on the relationship between income and financial support exchange behavior. When we added interaction effects, i.e., relationship satisfaction with children \times log (income), the parameter estimates of the model did not change. The

results indicated that the effects of the relationship satisfaction with children had no significant impact on how the income influences reciprocal behavior; hence there were no moderating effects ($\chi^2(3) = 2.43, p = .49$).

In the full analytic sample which contain additional indicators of social support potential and control for key demographic variables, some variables such as age, marital status, level of education and income (Model 1); marital status, level of education, income, level of depression (Model 2); level of education and income (Model 3) no longer demonstrated statistically significant differences in odds ratios. However, working status, level of physical health, frequency of contact with children and relationship satisfaction with children were consistently associated with financial support behavior.

Table 7. *Final Multinomial Logistic Regression: Predictors of Financial Support Both Received and Provided, Received Only, Provided Only, and Neither Received nor Provided (Interaction Effects)*

Predictor	Reciprocal vs. Referents (<i>n</i> =110)		Received only vs. Referents (<i>n</i> =1364)		Provided only vs. Referents (<i>n</i> =24)	
	B	OR [95% CI]	B	OR [95% CI]	B	OR [95% CI]
Socio-demographic characteristics						
Age	-0.01	0.99 [0.94-1.03]	0.02	1.02 [1.00-1.04]	-0.06	0.94 [0.85-1.04]
Gender (male) ^a						
Female	0.15	1.16 [0.70-1.95]	0.14	1.15 [0.89-1.50]	0.05	1.06 [0.39-2.88]
Marital status (married) ^a						
Single	-0.35	0.71 [0.40-1.24]	-0.17	0.85 [0.65-1.10]	-0.26	0.77 [0.25-2.40]
Education (above middle school) ^a						
Elementary School	-0.02	0.98 [0.59-1.63]	-0.27	0.76 [0.58-1.00]	-0.21	0.81 [0.30-2.18]
Working status (working) ^a						
Not working	-0.54*	0.58 [0.35-0.97]	-0.20	0.82 [0.61-1.09]	-0.88	0.42 [0.17-1.05]
Logged income	0.01	1.01 [0.59-1.72]	-0.00	1.00 [0.79-1.26]	0.67	1.95 [0.45-8.35]
Psycho-Physical Resources						
Cognitive health	-0.00	1.00 [0.95-1.05]	-0.01	0.99 [0.97-1.01]	0.05	1.05 [0.94-1.18]
Physical health	0.27*	1.32 [1.04-1.67]	0.01	1.01 [0.97-1.05]	-0.05	0.95 [0.79-1.15]
Emotional health	0.05	1.05 [1.00-1.12]	-0.00	1.00 [0.98-1.02]	0.02	1.02 [0.92-1.13]
Social Network Characteristics (with children)						
Proximity	0.10	1.12 [0.92-1.34]	0.07	1.08 [0.98-1.19]	0.29	1.34 [0.89-2.01]
Contact ^b	-0.76 ***	0.47 [0.33-0.66]	-0.41 ***	0.66 [0.58-0.77]	-0.09	0.92 [0.52-1.62]
Satisfaction	0.02	0.97 [0.97-1.06]	0.03 **	1.03 [1.01-1.06]	0.06	1.06 [0.94-1.20]
Moderation Effects between Relation with Children and Income						
	-0.00	1.00 [0.99-1.01]	-0.00	1.00 [0.99-1.00]	0.99	0.99 [0.97-1.01]

Note. *N* = 2010; reference group is “neither provided nor received”; ()^a as a reference; for all factors entered, **p* < .05; OR = odds ratio; CI = confidence interval; ^b contact via mail, phone.

4.3 Insight into Ways of Promoting Social Support Behavior

In total, six experts were interviewed and the total working experience in the field of gerontology was 155 years. This included a director of a senior welfare center, a president of a government-affiliated organization for the elderly, and a senior researcher at an ageing research center. All of the experts had a PhD degree, and most of them held several positions at the same time, including directors of an organization or senior center (*n* = 4), and

professors (n = 4), who also were working for Korean government-affiliated or international organizations (n = 3).

Participants indicated several factors that could facilitate or create barriers for the exchange of social support for Koreans aged 65+. The following sections describe the results of the study and the themes that emerged from the interviews and analyses, illustrated with examples of quotes from the experts.

4.3.1 Facilitators

Several facilitators that may help promoting social support exchange behavior among Koreans aged 65+ were mentioned in the interviews and overall, the importance of individuals, government and society emerged consistently from analysis of the interviews.

1. Facilitator at individual level: High functioning Koreans 65+

At the individual level, the experts identified the potential of Korean baby boomers and the importance of a sense of belonging among older adults as possible facilitators.

(1) The healthier Korean older adults today (4 experts)

According to experts, current Korean older adults are becoming much healthier and more educated than in the past. Four experts noted that the growing number of healthy older adults was a positive indication for exchanging social support and they stressed the potential for actualizing their resources.

‘The life expectancy in Korea is increasing to 80+ nowadays. Today’s older adults are eating well and doing more exercise, hence they are functioning better than compared to the past...’ (*Expert C*)

‘Korean Baby boomers are more educated and they are financially much better off compare to the older generation, hence they can participate better (in exchanging social support).’ (*Expert E*)

‘First, 1/3 of Koreans aged 65+ are registered at a senior welfare center and most of them are healthy and have strong willingness toward social participation. Second, most of older adults who come to senior citizen centers are over 75 years old, so they are less fit compared to those in senior welfare centers. However, they also exchange emotional support by talking to each other. There are big resources and we try to develop many programs for them.’ (*Expert F*)

(2) Please call my name: Importance of a sense of belonging (2 experts)

Two experts working in the senior welfare center observed the importance of feeling the sense of belonging among older adults. Some retirees are functioning well, and they are motivated to do something in the society and expect to be recognized by others. Experts also observed many cases in which the attitudes of older adults change positively after they participate social activities, especially when others appreciate them. According to experts, there are older adults who have potential to participate in exchanging social support but providing a sense of belonging could help promote the behavior.

‘In this district, older adults are not coming here (senior welfare center) to earn money. Some have PhD degrees (meaning high education), some retired as a principal or CEO. They say that they want to work and feel the sense of belonging. They say that they worked for a lifetime but after retirement, they feel stupid because there are no roles for them anymore.’ (*Expert A*)

‘It is hard to describe in words, but those older adults who visited our center were expressionless at first, but now they have brighter faces. For them, it is important that there is a place to go during the day; someone calls their name so that they are not socially isolated. We say people die because they are lonely.’ (*Expert D*)

2. Facilitators at government level: Growing Korean welfare system

At the governmental level, experts indicated the role of the Korean government to create a system to connect older adults, develop various programs, and motivate and educate the older adults as facilitators to promote support exchange behavior.

(1) Government investment is a turning point (3 experts)

Three experts mentioned the impact of government investment on promoting support exchange behavior. They acknowledged social programs, which emphasize mutual support among older adults, have increased recently; however, the main trigger for improvements was investment by the Korean government. One expert mentioned that it is hard to accelerate programs when the government sets different priorities for policies, for instance, prioritization of free childcare over welfare for senior citizens.

‘Korea was developed very rapidly as well as the welfare system and infrastructure. Jobs or leisure activities for older adults were developed naturally based on Korean traditional culture, which emphasizes mutual cooperation. However, the actual point where the system improved was when the government introduced new policy or service. Hence, when we watch the patterns of how Koreans have lived so far, the system led by government could be one important factor to revitalize or reinforce the social support behavior among older adults.’ (Expert B)

(2) Systematization is needed for continuous participation (4 experts)

Four experts pointed out that providing an atmosphere or environment to connect people in a systematic manner as a possible facilitator. It is more common in rural areas to observe mutual support behavior among neighbors based on Korean traditional culture, but it occurs less often in cities. Hence, many welfare centers in cities connect all the resources, and set the service delivery system to run the organization. Experts have observed that with a systematic support system, it is more effective to promote the participation of elderly adults; hence, there is a need to increase the number of platforms where the potential of older adults could be linked.

‘As an individual, it is difficult to continuously provide support to others. For example, one might not go to help when it rains or they are tired, then the person in need will be kept waiting. Therefore, we need to construct a delivery and transport system. We are already doing it in senior centers – we find a sponsor, volunteers and manage the organization and system. It is necessary to provide an environment for volunteers to gather and lead them in order to maintain their participation.’ (*Expert B*)

‘There is a group home in XX district (rural area) where older adults sleep, support each other and spend their days in the same place. Community spirit is less strong in the city area compared to the rural area. However, there are more centers for older adults in the city area where they act as a platform to connect older adults. The government could consider providing more platforms for older adults to exchange their emotions, such as support for each other’s loneliness.’ (*Expert C*)

‘When people get older, their network becomes smaller. What people gain here is making friends. Making friends naturally broadens their networks and creates opportunities to exchange support. After having such an interaction, and if it is maintained, people feel happy and visit such a place again. We need to provide an environment for people to share their emotions.’ (*Expert D*)

(3) Develop programs to wake up potential (2 experts)

Two experts indicated that the potential of the current older adults as a positive facilitator to promote support behavior. They also said it could be accelerated and actualized through programs. Experts conceded that older adults could support each other using their resources. Practically, those who are visiting senior citizen centers are physically highly functioning. In these centers they also provide courses or programs for older adults to learn something and maintain a high level of functioning, and this was found to be effective on the maintenance of their physical and emotional health.

‘There is a photography class in our center. Older adults in the advanced course teach the other adults in the elementary course. Likewise, we can derive lots of potential from the program...what people do often in a senior citizen center (KyongRoDang; 경로당) is to play “Go-Stop (sort of poker)”. It is needed to develop various programs to derive their potentials and exchange support.’ (*Expert A*)

‘Without a place like a senior center, people will probably contact neighbors. Then, it is possible that one gives more and one gives less. Those who give more might feel burdened and those who receive more might feel deep disappointment. So, it is needed to keep developing programs, which can teach them that providing is meaningful rather than only receiving it, and to create opportunities to exchange support...in our center, we teach hand/foot massage skills for free. They receive the service for free and they volunteer for others. Participants learn how good it makes them feel to do something for others. They learn how helpful it is for one’s emotional growth by sharing with others. This is what programs create.’ (*Expert D*)

(4) Educate to reproduce their talent (4 experts)

Four experts indicated that educating and building motivation for older adults were important facilitators. Based on one expert’s experiences in the center, people showed self-growth through education and in return they could also contribute to society. Experts mentioned that there are many older adults who are currently doing some things for others (e.g., volunteering). However, without motivating them it is hard to keep them engaged even though they usually had few expectations and started just to help others. It was not because they did not have the ability but it could be due to lack of enthusiasm, laziness, etc. Hence, their motivation needs to be increased and education opportunities should be provided so older adults can learn to share with others.

‘Most welfare centers are recreation oriented, but our center is little different. We have a Barista course, which older adults can learn and obtain a Barista license. Those people who have a license also form a club, volunteer or do a part-time job to make some extra money...education can actually be helpful for their own growth, but it can also be returned to profit the society. I assume, through education, people can also maintain their specialty so that their cognitive function can be maintained as well.’
(Expert A)

3. Facilitators at the societal level: Korean culture of “We”

At the societal level, experts indicated the Korean traditional culture, especially with collectivism and “Jeong,” as a facilitating factor for promoting social support behavior.

(1) Korean culture of collectivism and Jeong (e.g., cherishing people with pure hearts) (2 experts)

Experts indicated that Korea itself has a good basis to promote support exchange behavior because Korea has a culture of collectivism and a concept of “Jeong.” It is very natural for Koreans to help each other as they lived a community life for a long time. A culture of community and self-directed mutual support is still prevalent in the rural area. Although such a culture is diminishing because of the rapid urbanization process, the experts noted that mutual support is still well accepted (even in city areas) and older adults gather and form groups. In addition, Koreans highly value interpersonal relationships, and caring for others, which is what the term “Jeong” refers to.

‘In Korea we have a culture of sharing. We want to give what we have.’ (*Expert A*)

‘Koreans traditionally have formed village communities for a long time, lived a community life helping each other, so Koreans’ relationships with neighbors were very good. Although things changed in the industrial society, mutual support is still quite well accepted and influenced by traditional culture. Moreover, every village or apartment complex has a senior citizen center where they can make friends and share “Jeong”. So, adding up such realistic conditions, mutual support within the generation is quite positive in Korea.’ (*Expert F*)

4.3.2 Barriers

Experts mentioned several barriers that may hinder the promotion of social support exchange behavior among 65+. Overall, the important role of individuals, the government and society emerged consistently from the analysis of the interviews.

1. Barriers at the Individual level: Koreans in transition

The experts identified the financial difficulties among older adults; a male dominated cultural mindset, and the lack of understanding with regard to barriers that could hinder support exchange behavior.

(1) Financial difficulties of 65+: No time to think about the quality of life (3 experts)

Three experts indicated that financial difficulties among older adults were one of the biggest barriers for the promotion of support exchange behavior. Although Korea has had a very fast economic growth, the welfare policy and the social security system were developed only after the Korean War. Hence, there are many older adults who do not receive a sufficient pension when they retire. Furthermore, it is expected that current older adults will have a harder time benefitting from social security due to population ageing. In such a circumstance, experts noted that financial issues should be prioritized, as people cannot think about other things in their life when their basic needs are not met. If people have financial stress, they may become discouraged from participating in social programs, feel isolated and eventually it could make it harder for them to be financially independent.

‘As you know financial issues among older adults are a big problem in Korea. We have a very high elderly poverty rate. These older adults cannot really think about social support due to financial issues. The problem related to survival is very severe. It is best when these older adults can live financially more stable through social support.’
(*Expert A*)

‘Korea probably is different than Western countries in terms of psychological support. For instance, in Western countries, one might have enough pensions so they need psychological support to solve loneliness; in Korea, psychological support is the basis for solving the economic problem, which is to help older adults to escape from poverty more stably. People are disregarded because they do not have money...if one is depressed then it makes it harder for them to be financially independent...but in Korea, we cannot really think about quality of life yet.’ (*Expert C*)

‘Current Korean older adults took part in economic activities when the social security system was underdeveloped. So, those older adults cannot really get pension like those older adults in the well-developed western countries. Hence, it is needed to create places to make them support and help each other...’ (*Expert D*)

(2) A man should not: A patriarchal society (1 expert)

An expert pointed out that patriarchies in Korean culture could be a barrier for promoting the support exchange behavior. According to the expert, male older adults are usually too conservative to show their emotions, to reach out to others or to accept help from others. Although some male older adults have changed their attitude after joining some programs and current young-old adults are less patriarchal than their parents’ generation, such behaviors are still prevalent among male older adults.

‘The suicide rate among Korean male older adults is very high. Korean older male adults grew up within the structure of a patriarchal environment. Although people who are currently in their fifties and sixties are different, Korean male older adults in general still have a tendency to think that smiling or asking for something from others is not what a man should do. So, they act brusquely and have difficulties to softly accept the kindness that others provide.’ (*Expert D*)

(3) What do I get from it?: Lack of understanding (3 experts)

Three experts mentioned that a lack of knowledge or understanding of the meaning of social support might hinder the support exchange behavior. One of the experts confirmed that the volunteering rate among older adults in Korea is very low and one possible reason is that people do not know how to help or why they have to do it. In the Korean collectivist society, people might have supported each other by their own free will and mostly not guided by others. As they are not experienced with systematic methods of exchanging social support, older adults would find difficult to actualize their potential by sharing with others. Furthermore, with the lack of knowledge and education, some older adults believe in superstitions that dissuade them from sharing with other older adults, such as being near people who have dementia would give them dementia.

‘In the previous senior welfare center, there was a day care center for people with dementia next to the room where the healthy older adults stay. Some of those healthy older adults did not even like for the people with dementia to do exercise near by, saying it is unlucky.’ (*Expert B*)

‘Sharing what I have with others will create an opportunity to share with others; there is lack of such understanding. People often think if they give something to others then the others should do the same.’ (*Expert D*)

‘The volunteering rate among older adults is very low in Korea. The reason why we have such a low volunteering rate is that we have... how to say...lack of such a consciousness...current Koreans older adults have a lower level of education and they did not have a real chance to experience what it (exchanging support) is. They have lots of time but just go to senior center to play “go-stop” or go to a park. We need to create an atmosphere of how to be with others and guide them to know “how to” share with others.’ (*Expert E*)

2. Barriers at the governmental level: We do not know enough

The experts indicated lagged research and programs as barriers that might hinder the support exchange behavior.

(1) Need for further research and policy development (2 experts)

Two experts indicated that it is important for the Korean government to make an effort to improve policy and research. For instance, volunteers also need some financial support for their expenses, such as transportation or food. However, there is controversy about why volunteers should receive compensation and how much they should receive. Without sufficient support from the government to motivate people who are already doing something, it is difficult to make them continue. Furthermore, there is a lack of research and datasets focused on social support behavior among older adults. It is difficult to promote support behavior efficiently without systematic investigation.

‘Social support behavior will be decided by how we are building our society. For us, it is more important to see how the family support system is changing in Korea because there was no such social support in the past. Furthermore, if we see datasets in Korea, there are questions only asking how many times you phoned your friends or participated in activities.’ (*Expert C*)

‘Encouraging the behavior of exchanging support is quite weak. In other words, there is a lack of social policy on motivating older adults to care for each other—such as volunteering behavior. For instance, volunteers do not receive a salary, but they also need some money for transportation or food. In this case, people who have financial issues cannot really volunteer. Moreover, not many volunteers are consistently volunteering because there is a lack of jobs that people can do and feel are worthwhile doing them. Furthermore, there is a lack of research on how we mobilized the talent of older adults to help others, what the effects are and what the problems are.’ (*Expert E*)

(2) Need for future-oriented programs (2 experts)

Two experts suggested developing programs that are future-oriented and focus on prevention. Although the importance of prevention is often discussed, it has not been actively acted on because of the costs. Moreover, future-oriented programs, where people could experience different scenarios, like how it is like to be demented or other age related symptoms, would help increase awareness, understanding, and could promote preventive behavior.

‘Older adults go to the senior welfare center to eat. They have a strong attachment to life. In our case, if we say we will provide a lunch box, they do not attend other programs but come to eat. If the center does not provide food, they will visit less, I think. We should question ourselves about how the senior welfare center is functioning and operating now. Although there are many good programs in senior centers nowadays, still we need to develop multi-functional senior centers where older adults can experience various things including health, education, and culture relevant things.’ (*Expert A*)

‘There is a lot of potential to promote support exchanging behavior within the generation, but overall, there is still a lack of motivating factors or education, lack of relevant research and institutional framework...we should do more preventive work through such things like rehabilitation programs, but we only talk about it because it costs a lot.’ (*Expert E*)

3. Barriers at the societal level: cultural changes happening too fast

The experts indicated the need for changing stereotypes about older adults, concerns about people losing the concept of collectivism and the existing consciousness of authority by support providers.

(1) People in 70s cannot do it: Stereotypes of older adults (1 expert)

One expert indicated that the stereotype of older adults in the Korean society is a barrier. Although, Korea is still famous for respecting older adults under the norm of filial piety, older adults are now gradually treated as incompetent in an industrialized society. Without changing the people’s mindset, it would be difficult to promote support behavior.

‘There is a lot of potential among older adults, so we can view them positively. However, there is much more of a negative awareness on ageing and older adults. It is wrong to think that someone over the age of 70 cannot do much. It is an important task to change the perspective of the whole society.’ (*Expert F*)

(2) I just know you from here: Losing collectivism (1 expert)

There was an expert who pointed out the phenomenon of losing collectivism as a barrier. In Korea, people used to build a strong network based on their hometown, school, etc.

However, it becomes more difficult to promote support behavior in an urbanized society as people hardly find where to build a network.

‘Korea has collectivism characteristics, which used to be connected in the name of people from my village, people from my school, and my cousins or so. It could have been easier to promote behavior within such a cultural context. However, such a culture is quite diminished nowadays, so we cannot really force older adults to do something for others.’ (*Expert C*)

(3) I am better than you because I am giving you something: Consciousness of authority by provider (1 expert)

One expert indicated that the mindset of some Koreans acts as a barrier to the creation of an environment conducive to exchanging social support. The expert observed that some support providers, such as volunteers or sponsors, expect to be noticed and treated differently because of their “providing” behavior.

‘There is some kind of consciousness of authority by provider, such as by volunteers and sponsors. For instance, we give food or some amount of money for volunteers because they request so. Some of them think they should receive some treats. Moreover, patronage law is tightened so it is very clear that money flows to the client. However, some sponsors behave as if they are feeding the center. So, still in Korea, we have consciousness and attitudes that the receivers are poor and the provider is great so that the provider should be treated nicely.’ (*Expert B*)

CHAPTER 5: DISCUSSION

Regardless of the positive effect of social support on older adults and proven evidence of individual differences in functioning, little attention has been paid to the exchanging of social support within the generation of older adults, especially in Asia. The main aim of this dissertation was to search for possibilities of promoting social support exchange behavior of Korean older adults using the KLoSA and through in-depth interviews with experts. In the dissertation, the relationship between available resources, change and actual social support behavior was examined. Furthermore, expert perspectives on factors facilitating or hindering the exchange of support, including cultural factors specific to Asia were obtained. The high degree of heterogeneity observed from the KLoSA and insights gained from experts make it worthwhile to understand pathways explaining the observed variability between older Asian adults. In addition, the results suggest effective ways of promoting the intragenerational exchange of social support for future studies.

5.1 How is Older Adults' Functioning in Later Life?

The main goal of this study was to gain a first descriptive insight into the likely heterogeneity of aging in Asia from a social support perspective. To this end, we used two-year longitudinal data from the KLoSA to examine key indicators of psycho-physical functioning and financial resources that we consider to represent the potential to provide social support among Korean adults aged 65+.

5.1.1 Population-Level: Mean Decrease in Support Potential Over Two Years

The results from the analysis at a population-level confirmed the findings of most previous aging studies (Leung et al., 2007; Phillips et al., 2008; Tyler, 2006; Uchino et al., 1996). First, the sample population tended to lose social support potential in the domains of both aid and affect over time including: the level of cognitive impairment, feasibility of instrumental activities of daily life and a risk for clinical depression. However, the income of

the sample population increased over time. The finding is in line with previous studies showing the poverty rate of Korean older adults to decrease significantly between 2006 and 2008 (Lee & Phillips, 2011).

Second, dispersion of the number of cases in each potential group was different in the sample depending on the types of social support potential. That is, the majority of the sample population had a relatively high level of cognitive impairment, low level of income and a high risk for clinical depression compared to the ability of instrumental activities of daily life. Such a result highlights the sample population has higher potentials to provide physical support compared to guidance, financial and emotional support.

5.1.2 Individual-Difference Level: Evidence for Maintenance and Increase in Support Potential Over Two Years

Different results were obtained with regard to individual differences. Similar to the population-level analysis, there were several cases that lost social support potential over time. However, in each domain we found that there were cases that showed improved or stabilized functioning indicating social support potential over time. In other words, our findings confirmed that social support potential exists and may be maintained or even increased within the 65+ age group in Korea, but there is a high degree of heterogeneity within the sample population. This occurred for all indicators of social support potential, both in terms of levels and for the change profiles over time.

5.2 Is the Potential Reflected in Actual Social Support Exchange?

The purpose of this study was to describe the financial support behavior of Korean older adults (both received and provided, neither received nor provided, received only, and provided only) in relation to their psycho-physical resources and social network characteristics with their adult children. Financial support included monetary (cash) transfers, either regularly or irregularly, to/from at least one child older than 45 at T1. Socio-

demographic characteristics, psycho-physical resources, relationship with children and financial status of Koreans aged 65+ at T1 were assessed.

5.2.1 General Characteristics of Participants Regarding Financial Support Behavior

In the descriptive results, we found significant differences for different financial support behavior in socio-demographic characteristics, i.e., gender, marital status, level of education, income (logged), and working status. Specifically, male, married, with higher level of education, and those who were working tend to do exchange financial support. Moreover, older adults who showed reciprocal behavior had a higher income than the average of the respective subgroups. However, age was not significantly different across subgroups. Using the multinomial logistic regression, we also found that age is not associated with financial support behavior.

Traditionally, Asian elderly parents receiving caregiving or support from their children have long been perceived as common norms, responsibility, or duties of children (Chou et al., 2004; Jang, Avendano, & Kawachi, 2012; Tsutsui, Muramatsu, & Higashino, 2014). However, results of our analyses provide evidences that ageing does not necessarily guarantee the support from children in the current society and it describes the diminishing concept of filial piety in Korea. Such results are consistent with previous findings not only in Korea but also in other Asia countries (Kim & Cook, 2011; Statistics Korea, 2012; Sung, 2001; Tsutsui et al., 2014). There is no age difference with financial support behavior in the sample and this study confirms that age is not a significant predictor of engaging in financial support behavior.

5.2.2 Analysis of Relative Influence of Level of Functioning, Social Network Characteristics and Financial Status on Financial Support Behavior Among Older Adults

The results using multinomial logistic regression analysis to predict the factors that may influence financial support behavior provides evidence for factors that predict reciprocal financial support behavior. In terms of the regression analysis; there are four main findings pertinent to this study.

First, working status was found to be a predictor of financial support exchange behavior among Korean older adults, but not the amount of income. Carstensen and Hartel (2006) argued that people save money because they are worried about the time when they need it. Unemployment is known to have a negative effect on subjective-wellbeing and it affects psycho-physical symptoms (Moller, 1991; Waddell & Burton, 2006; Wanberg, 1995). Conversely, reemployment was found to be beneficial for better health of older adults, improved self-esteem, reduced psychological distress, etc. (Rueda et al., 2012; Waddell & Burton, 2006).

In Korea, there is a higher rate of poverty among older adults who co-resided with their children (Kim & Cook, 2011); poverty reduction did not benefit those who were older and living alone as well (Lee & Phillips, 2011). Most of Korean older adults are retired and they are economically disadvantaged as they grew up in economically underdeveloped times (Park, 2007). Furthermore, their assets are mostly illiquid (i.e., house) in Korea, which can be hardly converted to cash to immediately use it in the open market. Considering the situation in Korea, it is possible that having a job itself gives more meaning, flexibility, and self-esteem to do something than having income or asset; hence working status may be bringing more impact on financial support behavior.

Second, physical health was another significant predictor of financial exchange behavior among Korean older adults. The participants who performed better in physical

health were more likely to exchange financial support with their adult children. It has been argued that the loss of physical status can be led to personality changes or result in depressions (Park & Lee, 2007). There are evidences from different fields of ageing research demonstrating the relation between motivation or self-esteem in relation to physical health in old age. For instance, healthier older adults tend to show higher self-esteem and higher motivation to involve in activity (Alpass & Neville, 2003; Orth, Trzesniewski, & Robins, 2010). Hence, the finding of the study suggests the importance of acknowledging physical health of older adults in financial exchange behavior.

Third, frequency of contact with adult children was found to be the best predictor of both financial support exchange behavior and received only behavior among Korean older adults. However, proximity with adult children could not influence financial support behavior across subgroups and this was a finding not anticipated. Previous studies that were conducted in other Asian countries, such as in China, showed that proximity to the nearest non-co-residing child had a significant effect on help received, although the study conducted covered only those who have a child living in the same neighborhood (Bian et al., 1998). In this study, proximity with children was not a significant predictor with regard to support behavior and this finding highlights the importance of frequency of contact rather than distance. Such findings suggest how the relationship with children has impact on support behavior with children in current Korea society, but in terms of quality and not physical distance.

Lastly, relationship satisfaction with adult children was found to be a significant predictor for financial support received only behavior. Level of relationship satisfaction with adult children could not predict reciprocal behavior or provided only behavior, which is an unanticipated finding.

Our results support previous evidence that the quality of interaction with family members is an important factor for the wellbeing of older adults (Cheng, Li, Leung, & Chan, 2011) as it influences the outcome of financial support behavior. The most notable finding we

have is empirical support to define that the impact of physical health and quality of relationship on financial support behavior, while previous researches provided evidence regarding positive effects of social support on physical and psychological health of older adults (Charyton et al., 2009; Lee et al., 2012; Leung et al., 2007; Phillips et al., 2008; Tyler, 2006; Uchino et al., 1996;).

5.3 Insight into Ways of Promoting Social Support Behavior

This study explored the opinions of experts, who had experience with Korean older adults, regarding the factors that can facilitate or hinder the promotion of social support exchanging behavior in Korea among adults who are 65 or older. Our findings support the importance of an individual, governmental and society-wide approach for better actualizing social support exchange behavior among older adults. Our findings, presented below, present a number of key factors that act as facilitators and barriers that emerged from the interviews we conducted.

5.3.1 New Koreans 65+

The older population in Korea is unique and exhibits different characteristics from the pre-post war generations. First, the findings of the study show that the unstable financial status of Korean older adults is a factor that hinders social support behavior. After the Korean War (1950-1953), Korea was one of the world's poorest countries. However, Korea was the world's fastest growing economy from the 1960s to the 1990s, and now it has become a developed country as a member of the G-20 major economies (Eichengreen, Perkins, & Shin, 2012). Nevertheless, Korea has the highest poverty rate for elderly citizens among the OECD countries (Organisation for Economic Co-operation and Development [OECD], 2011). Due to a poor financial situation, they have no room to think about social support, nor their psychological health. Our finding supports previous work that made a connection between financial strain and psychological health, such as a lessened feeling of control and self-worth

(Krause et al., 1991). Thus, older adults with a poor financial condition should not be neglected in relation to support behavior.

Second, the older population's educational level appears to be a hindering factor for exchanging social support. Korean older adults tend to not understand the meaning of social support. Due to lack of knowledge or education, some even believe in superstitions, for instance, that dementia is a transmitted disease. Korea has a huge educational gap between younger and older generations, and most of these older adults (mainly born before the Korean War) are under educated (OECD, 2014). According to Kim & Lee (2008), a high portion of Korean older adults are unable to read and cannot understand basic written medical instructions. Not surprisingly, they also found positive associations between a lower level of education and health literacy and perceived health status. A lower level of perceived health status might hinder older adults from providing physical support to one another even if they are objectively physically highly functioning.

Third, patriarchal characteristics of Korean male older adults, such as having difficulties in expressing oneself or hesitating to be in touch with others, can prevent them from sharing their resources with others. The current Korean older adults grew up when men made the decisions and had authority over other family members, such as women and children. For instance, the majority of Korean fathers who love their children did not show their affection and did not maintain a comfortable relationship with the family since the atmosphere was dependent on the father's moods (Park, 2001). Nowadays, although many Koreans do not strictly adhere to the patriarchal culture (Park, 2001), we cannot ignore that most Korean older adults grew up in a patriarchal society. Especially Korean males find it hard to express their emotions and to reach out to others.

Fourth, fulfilling the sense of belonging is an important factor for Korean older adults to exchange social support because it affects psychological health of older adults. Previous studies suggested that a sense of belonging was associated with psychological health and

symptoms, such as loneliness, emotional distress, and mental illness (Sargent, Williams, Hagerty, Lynch-Sauer, & Hoyle, 2002). Moreover, the feeling of belonging in a group was associated with a higher level of meaningfulness (Lambert et al., 2013) and the sense of belonging was identified as a predictor of reasons to live a life in older adults (Kissane & MacLaren, 2006). Findings of the study exhibit that Korean older adults expressed the need of feeling the sense of belonging, and people who participated in social activities showed positive emotions over time. Furthermore, the study also shows that some Korean older adults feel a sense of disorganization after retirement and look for something meaningful to do.

Fifth, experts in this study were positive about the growing number of Korean older adults as a potential resource for social support, even though there are many studies that express concerns regarding ageing populations (Kim, 1999). Korean baby boomers (born 1955-1963), who are becoming older adults, were born after the Korean War, and they grew up under a rapid process of industrialization and have lived in better conditions than generations before. Therefore, they are healthier and more educated compared to their parents' generation.

5.3.2 The Role of Korean Government

Korea had a fast economic growth as well as development with social policies. Experts interviewed for this study discussed past and present statuses of the social environment for older adults in Korea and mentioned several factors that might influence support behavior of Korean older adults.

First, our findings suggest that the Korean government should work on providing more opportunities to connect people in a systematic manner, especially by creating more platforms for older adults, such as senior centers. Previous studies revealed that social participation, social support, and feelings of loneliness were associated with mortality (Steptoe, Shankar, Demakakos, & Wardle, 2013; Sugisawa, Liang, & Liu, 1994). Senior

centers were found to have a positive impact on older adults; for example, they could be helpful for forming supportive friendships outside of the center environment, and could provide better-perceived health and caregiving support (Aday, Kehoe, & Farney, 2006; Kim, Harada, Miyashita, Lee, Park, & Nakamura, 2011). Furthermore, senior centers played a vital role as a resource for boosting the social engagement of older adults who lacked companionship (Ashida & Heaney, 2008) and it provided opportunities for socializing (Turner, 2004). In line with previous findings, experts in this study also noted that although the size of a social network becomes smaller as people become older, systematic support provided by senior centers, for instance, provide support settings where people can gather, form a connection between people and resources can be helpful in maintaining and actualizing the resources of older adults.

Second, the findings also suggest that the Korean government should support facilities for older adults for whom they can develop various programs, especially (a) programs that can educate people to share their talent, (b) programs that can boost motivation, and (c) programs that are preventive and future oriented. Previous studies found that the participation rate of senior centers has declined and they have had difficulties maintaining their role in the community (Fitzpatrick & McCabe, 2009). Participation rates are associated with gender differences, income, and level of education (Miner, Logan, & Spitze, 1993; Wick, 2012), hence different programs that address the different needs of people are vital to preserving the resources of older adults and for actualizing support behavior.

Experts in this study indicated that many attendees at senior centers are physically highly functioning. However, most centers mainly provide food or have programs that are recreation oriented. The result of this study emphasizes a great need for developing educational programs so the resources of older adults can be utilized. These suggestions are consistent with previous findings, which highlighted that the learning activities of older adults can help create and preserve communities (Merriam & Kee, 2014).

Furthermore, the results of this study also suggest the importance of providing programs that are motivational. There is evidence that motivation to volunteer, make friends, etc. decreases as people become older (Dávila & Díaz-Morales, 2009). However, it seems that with the right program, it is possible to enhance participation. There is evidence that after a leadership-training program at a senior center, self-efficacy and initiative at the beginning of new activities increases (Grasso & Haber, 1996).

Moreover, a lot of previous research has emphasized the importance of prevention programs for older adults to promote better health outcomes and decrease health spending (Ogden, Richards, & Shenson, 2011; Yamada, Arai, Sonoda, & Aoyama, 2012). In line with previous studies, the findings of this study also suggest that in order to maintain the functioning of older adults, which is the basis for support behavior, a multipurpose senior center should be developed that has a preventive function.

Third, the findings of this study suggests that the Korean government should continuously work on improving research especially by paying attention to the potential of older adults generation. Korea handles the ageing issue as an important topic. The government invests across almost all disciplines; for instance, a high-tech research and development project has been in the works since 2009, there are three longitudinal data sets concerning older adults, and the IAGG World Congress of Gerontology and Geriatrics was held in 2013 (Yoon, 2013). However, our results show that there is still a lack of research, especially studies that treat older adults as a potential source of social support. Furthermore, there is not enough in-depth research and datasets exploring the network and support behavior of older adults.

Korean Welfare policy was implemented after the Korean War as an emergency aid. It showed noticeable progress in 1987 when the country became a democratic nation (Kim, 2013). After this, a pension for the elderly was enacted in 1988, Elderly Health Promotion General Policy in 2002, Elderly Medical Care Insurance in 2005, and Long Term Care

Insurance in 2008 (Shim, 2010). Experts interviewed for this study also noted that the Korean government improved its welfare policy after the Korean War. Furthermore, currently there are various programs taking place in the senior centers and Korean older adults are benefiting from those programs. However, there was sustainable growth and improvement in social services when the Korean government intervened by introducing, investing or paying attention to a new policy. These findings of the study highlight the role of the Korean government as very important; the degree of success or failure on the possibility of exchanging social support is still largely dependent on the Korean government.

5.3.3 Fast Moving Korean Society

The Korean traditional culture is changing fast and understanding the circumstances that Korean older adults are facing is necessary to promote support-exchanging behavior from a person-in environment perspective. The most significant characteristics of Korean culture and the current issues with regards to support behavior as perceived by experts are discussed below.

First, experts of the study pointed out the characteristics of Korean traditional culture, especially collectivism and “Jeong (emotional connection; feeling, love, affection, sympathy, cherishing people with pure hearts, etc.)” as facilitators for promoting social support behavior. Collectivistic cultural values emphasize filial devotion, harmony, sociability, etc., while individualistic cultural values emphasize self-reliance, autonomy, competition, etc. (Cho, Mallinckrodt, & Yune, 2010). The culture of Korea is distinctly based on collectivism (Lee & McNulty, 2003). It is even evident by the use of language. For instance, in the Korean language, “we” is used much more than “I”, Koreans rarely use the term “mine” when describing something. Koreans say “our mother”, “our house” or “our country” instead of “my mother”, “my house” or “my country”. Based on collectivistic culture, Koreans highly value the interpersonal relationship with the concept of “Jeong”. Experts in this study noted

that collectivistic culture together with the concept of Jeong in Korea naturally bonds people together and promotes collective behavior even more strongly. Thus, encouraging people to gather and exchange support would be easier in such a cultural context. However, the results of this study also show that the Korean culture of collectivism is in transition toward individualism. This was similar to a previous study that argued the Korean culture of collectivism has been increasingly shifting to individualism since Korea's financial crisis in 1997 (Lee & McNulty, 2003). Such a cultural transition would challenge the Korean society; hence, it would be needed to seek a different approach with regard to social policy in order to promote social support behavior.

Second, the findings of this study also indicate that the stereotype about aging in Korea is a barrier to the promotion of support exchange behavior among older adults. A previous study revealed that beliefs about aging vary by culture, age and gender. However, Koreans showed higher levels of anxiety about ageing, greater fear of older people, and more psychological concerns than Americans (Yun & Lachman, 2006). There is evidence that a stereotypical belief regarding age affects older adults in the context of employment (Chiu, Chan, Snape, & Redman, 2001), but also the older adults themselves directly. Specifically, there is evidence that age stereotypes influences behavioral outcomes of older adults (Meisner, 2011). For instance, Chasteen, Bhattacharyya, Horhota, Tam, and Hasher (2005) found that concerns about being negatively stereotyped regarding age influenced memory performance. Stein, Blanchard-Fields, and Hertzog (2010) also found that priming a negative age-stereotype undermined memory performance for a small sample of older adults. As age stereotypes affect older adults internally and externally, intervention—such as anti-age discrimination policy—would be needed to change the negative perspectives on aging throughout society.

5.4 Limitations

5.4.1 Quantitative Analysis

This study has a few limitations I wish to mention so that findings can be interpreted accordingly. First, the survey of KLoSA datasets does not cover the possible effect of Korean Long Term Care Insurance (LTCI), which was introduced in 2008. The datasets in this study (wave 1) was surveyed before Korean LTCI was introduced. Previous findings revealed that in Japan, on average, perceived filial obligation norms declined after long term care insurance was introduced (Tsutsui et al., 2014). Therefore, there may be different results with respect to levels of support from adult children or interaction with children when we account for the period after LTCI in Korea was started (from wave 3).

Second, the KLoSA survey participants are those who were not institutionalized, which indicates that the most of participants are highly functioning. Thus, the data for cases where an older adult is physically severely deteriorated may have been excluded from the study, which could lead to a bias in the selection of participants. Moreover, such a sample may influence the results of the present study so that objective measurements of functioning may have been less significant predictors of financial support behavior. For instance, less healthy older adults may need greater instrumental support than healthier older adults, and therefore they receive even more support.

Third, this study looks at individuals who are not living with children. Thus, it should be noted that older adults living with children may show a different financial support behavior, and the availability of financial resources among older adults living with children may vary.

A fourth potential limitation is that we could only measure the “income” but not assets due to the sensitivity of questions and too many missing values. Older adults may not have regular income once they are retired and assets may have been helpful in understanding financial support behavior in depth.

Finally, taking into consideration that the average age of the sample population was over 73 with a low education level, misunderstanding the concepts and terms of income might have occurred in this survey (Moore, Stinson, & Welniak, 2000). In particular, the financial measurements of the KLoSA dataset showed a considerable number of missing values.

5.4.2 Qualitative Analysis

Study 3 was limited to six experts with a proven track record and reputation in the field of gerontology, especially those who have practical experiences with the elderly population in Korea. However, the observations and suggestions provided by experts in this study cannot represent the view of other potential experts who were not interviewed in this study. Furthermore, since the findings of the study are based on the view from the experts especially from an administrator's position, the actual perspectives of older adults with regard to facilitators and barriers for promoting social support behavior could be different. In addition, the experts who shared their observations from their experiences were working either in the Seoul metropolitan or near by. Therefore there may be different results with respect to support behavior among older adults when we account for rural areas.

5.5 Findings and Suggestions for Future Research

Despite the limitations mentioned above, this dissertation has implications for ageing research. To our knowledge, this study is among the first to provide evidence of psycho-physical-financial functioning and resources that can be regarded as proxies of social support potential among adults aged 65+ using longitudinal datasets from Asia; to indicate predictors in financial support behavior of Korean older adults, and; to explore the possible factors that could promote social support exchange behavior among older adults in Asia. Hence, despite the limitations mentioned above, the factors that were described in this dissertation may provide a valuable overview of Asia where there is a rapidly growing ageing population combined with the diminishing traditional concept of filial piety.

This dissertation confirms existence of social support potential of Korean older adults. Quite a large number of older adults in the sample of KLoSA were physically highly functioning, which indicates positive future for developing resources of older adults so that it can be exchanged at the intra-generational level. Furthermore, older adults who had a job tended to show a higher level of functioning in many aspects. Hence, policy makers or researchers should work on developing strategies to use resources of older adults in a productive way. Furthermore, this dissertation presents the different patterns of social support potential changes over time between a group of older adults and older individuals. The analysis of individual differences clearly suggests potential to maintain and even increase intragenerational support potential regardless of aging. The present dissertation provides a basis to develop a positive concept and culture of aging for society by highlighting the latent potential of older adults. We suggest that further research in all age-related fields approach aging issues with consideration for individual differences.

The findings also describe several factors that may influence the support behavior of Asian older adults with their adult children even with the diminishing concept of filial piety, which has long been influenced by Confucianism and Buddhism as with many other East Asian countries. In addition, the results indicate that distance may not play an important role in exchanging support behavior, but the quality of relationships is still important. Hence, in search of improving the quality of relationships, with developed mobility and technology in a contemporary society, using different methods could be helpful in promoting support behavior of older adults.

Given the findings of preserved functioning in many older Korean adults, indicating existing social support potential among this group of older Asian adults, we provide several suggestions for future studies. First, possible factors that could lead to the observed individual differences were not explained here. Thus, a further investigation of our descriptive findings, including a comparison of those individuals who improved, stabilized, or deteriorated in their

social support potential may be helpful in building our knowledge of how to improve or at least maintain the functioning and thus support potential of older adults. Furthermore, given the importance of the resources of older adults for promoting better support behavior outcomes, their resources should be carefully assessed. Researchers should be aware of the heterogeneity of underlying conditions of older adults and should develop individualized assessments in order to promote social support exchange behavior.

Second, due to a fixed cut-point of some measurements used in this study (i.e., K-MMSE, K-IADL, and K-CES-D10), it was not possible to test the older adults who might have potential beyond the maximum cut-point level. Hence, development of measurements that could test the maximum potential level of older adults for different metrics is suggested.

Third, support behavior is found to be strongly influenced by cultural background (Huang & Deng, 2008). Therefore, understanding the relation between the level of social support potential including change in potential and the actual social support behavior within the context of culture is a fruitful avenue for further research. Specifically, there are multiple factors which determine the support behavior of older adults, hence, comprehensive understanding of the resources of older adults must be considered from socio-economic status, psychological, biological, and network characteristics at an individual level and also with regards to social factors or the environment, such as changes in culture.

This dissertation suggests that the Korean government, or policy makers, should develop future oriented and prevention-focused programs as well as foster a better environment to incite the potential of Korean older adults.

5.6 Final Conclusion of the Present Dissertation

Social support is an important resource to boost psychological wellbeing and physical health conditions for older adults. Although there is evidence for the positive effect of social support on other areas of functioning throughout the adult lifespan, there is a limitation on

how to provide enough support to the older generation due to its rapid growth. Furthermore, relatively little attention has been paid to the availability of social support potential within the generation of older adults (*intragenerational support potential*) in Asia.

This dissertation provides a novel glance into the available and heterogeneous potential to provide social support among the Korean population aged 65+ who may, in part also due to societal developments such as decreases in filial piety, be more and more dependent on generational peers for support. The findings emphasize that inter-individual differences in level and change in resources (social support potential) should be considered in the development of individual support promoting interventions to promote support behavior. The high degree of heterogeneity suggests that functioning and the related potential for support is not only a story of loss, but also one that includes maintenance and even gain for some individuals, making it worthwhile to understand pathways to the described variability between older Asian adults.

The dataset used in this study has the potential to be used for other international comparative studies. The KLoSA has developed a research network with ‘Health and Retirement Study (HRS, US)’, ‘Studies on Health and Retirement in Europe (SHARE, EU)’, and ‘English Longitudinal Study of Ageing (ELSA, UK)’. Hence, it covers key research areas such as family structure, health, employment, income, asset and subjective expectations (Boo & Chang, 2006).

Furthermore, interviews with key experts from the field of gerontology enriched the findings and provided outside perspectives of the social support behavior of Korean older adults. Our findings present a number of key facilitators and barriers to promote support behavior among older adults, which emerged from interviews. This study found that the Korean government showed a fast improvement with regard to the living environment of older adults, and that Koreans showed improved life expectancy and potential abilities to exchange social support. However, there is much room to improve to meet different needs of

the increasing aging population and to promote social support behavior within the generation of older adults. Researchers in the field should carefully consider multiple factors from various angles so the support behavior of older adults is not only dependent on individuals but also on the society. Findings from the present dissertation suggest acknowledging the characteristics of individuals across generations, the important role of the government and society in order to utilize the social support potential of older adults.

CHAPTER 6: REFERENCES

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CHAPTER 7: APPENDIX

Appendix 7.1 Korean Longitudinal Study of Aging

All the currently available longitudinal datasets in Korea were reviewed in order to check the validity of using the data prior to choosing KLoSA. The KLoSA was chosen as the dataset for this study for four reasons.

First, KLoSA is most closely related to the purpose of the study. In order to find a dataset suitable for the study a literature review was conducted by carrying out computer-based searches from three databases—PubMed, PsycINFO, and ISI Web of Science—for all published articles up to May 26th, 2012 in the English language. These three databases were chosen taking into consideration the characteristics of this study which is to investigate the protective and risk factors of social support across multiple disciplines of biology, psychology, and socio-economic. The following key words and phrases were used: ‘social support’ and ‘aging’ and ‘Korea*’ and ‘longitudinal*’. In these three databases, a total of 16 articles were found according to the search terms. Among them, four longitudinal datasets were used for the subject of aging study: Ansan Geriatric Study (AGE), Korean Longitudinal Study of Ageing (KLoSA), Korean Longitudinal Study on Health and Aging (KLoSHA), and Suwon Longitudinal Aging Study (SLAS). The AGE and the KLoSHA investigate the geriatric status of the older persons in Korea, which does not exactly cover the same topics as this study. The sample of SLAS is limited to age 65 and older living in the Suwon district community, which has limitations to represent the whole population of Korea. However, the characteristics of the sample population and also the topics of the KLoSA encompass the aim of this study. The survey of KLoSA is categorized into seven domains: (1) demographic; (2) family; (3) health; (4) employment; (5) income; (6) assets and debts; and (7) subjective expectations. The sample population of KLoSA is representative of Koreans aged 45 and older and it focused on the people living in households. Additionally, a total of 10,254 individuals completed interviews using computer-assisted personal interviewing (CAPI) methods. Households were sampled

nationwide (except the area of Jeju Island) by multistage stratified area probability sampling (based on geographical area). The survey was conducted every even numbered year since 2006, and mostly using the same categories. The first wave of the survey took place between August and December in 2006 and the second wave of data was collected between July and November in 2008. This study analyzes the participants' age 65 and older.

The second reason why KLoSA was for this study is that it has been approved by the Korean government. Although, according to the "Statistical Act of the Republic of Korea", corresponding departments and research institutes play a leading role in conducting surveys, all of the procedures (from the research plan to the results) of nationwide survey, including panel studies, must be approved by the National Statistical Office (Statistics Korea, 2010).

Third, the dataset has the potential to be used for international comparative studies. The KLoSA has developed a research network with the 'English Longitudinal Study of Ageing (ELSA, UK)', the 'Health and Retirement Study (HRS, US)', and the 'Studies on Health and Retirement in Europe (SHARE, EU)'. Hence, it shares key research areas such as family structure, health, employment, income, asset and subjective expectations (Boo & Chang, 2006).

Finally, KLoSA has several advantages as longitudinal data, such as the ability to study dynamic relationships, to model the differences among subjects, to establish causality and so on (Frees, 2004).

Appendix 7.2 Informed Consent (Korean)

연구 제목: 65 세 이상 한국 노인의 사회적 지지 행동에 관한 질적 연구: 전문가의 관점(A qualitative study exploring the social support behavior among 65+ in Korea: perspectives from experts)

본인, _____은/는, 취리히 대학교 심리학과 소속 심진영이
작성하는 연구 “A qualitative study exploring the social support behavior among 65+ in Korea:
Perspectives from experts” 의 인터뷰에 동의 한다.

본인은 본 연구를 위해 수집된 정보에 관한 기밀 엄수 및 나의 참여에 대한 익명성 보장에
대하여 고지 받았으며, 또한 연구 과정 및 기타 문제에 관한 질문에 대해 충분한 답변을
들었으며, 뿐만 아니라 나는 동의를 철회하거나 본 연구의 참여 혹은 활동을 어떠한 편견없이
언제든지 중단할 수 있음을 권고 받았음을 확인한다.

본인은 본 연구를 위해 한 가지 혹은 그 이상의 전자 기기의 녹음을 통한 참여에 동의한다.
이러한 연구와 관련된 자료들은 완벽히 익명으로 보관될 것이며, 연구의 결과는 학술지 혹은
책으로 출간 될 수 있음을 이해한다.
그리고 본 인터뷰에서 얻어진 정보들은 본 연구를 위하여 사용 될 수 있음에 동의한다.

장소 및 날짜: _____

인터뷰 참여자 서명: _____

그 밖에 더 하실 말씀이 있으시면 아래의 주소로 연락하여 주시기 바랍니다.

Jin Young Shim

주소:

전화 (스위스):

(한국):

팩스 (스위스):

이메일:

Appendix 7.3 Informed Consent (English)

Research Title: A qualitative study exploring the social support behavior among 65+ in Korea: perspectives from experts

I, _____, agree to be interviewed for the project entitled “A qualitative study exploring the social support behavior among 65+ in Korea: Perspectives from experts”, which is being produced by Jin Young Shim of Department of Psychology, University of Zurich.

I certify that I have been told of the confidentiality of information collected for this project and the anonymity of my participation; that I have been given satisfactory answers to my inquiries concerning project procedures and other matters; and that I have been advised that I am free to withdraw my consent and to discontinue participation in the project or activity at any time without prejudice.

I agree to participate in one or more electronically recorded interviews for this project. I understand that such interviews and related materials will be kept completely anonymous, and that the results of this study may be published in an academic journal or book.

I agree that any information obtained from this research may be used in any way thought best for this study.

Place and Date: _____

Signature of Interviewee: _____

If you cannot obtain satisfactory answers to your questions or have comments or complaints about your treatment in this study, please contact:

Jin Young Shim

Address:

Phone:

Fax:

E-Mail:

CURRICULUM VITAE

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Education

09/2011 – 09/2015 Department of Psychology, University of Zurich, Switzerland
 Doctoral Researcher
 09/2010 – 06/2011 Department of Social Work, National Taiwan University, Taiwan
 Doctoral Researcher
 09/2007 – 07/2010 Department of Social Work, National Taiwan University, Taiwan
 Master
 09/2002 – 07/2006 Department of Social Work, National Taiwan University, Taiwan
 Bachelor
 03/1999 – 02/2002 Anyang Foreign Language High School, Korea

Work Experience

01/2014 – 06/2014 *Research Project Advisor*, Research project, research commissioned by Taiwan Ministry of Health and Welfare
 04/2011 – 03/2012 *Overseas Research Analyst*, Korea Health Insurance Review and Assessment Service (Korean Government-Affiliated Organization)
 09/2010 – 11/2010 *Market Analyst*, Korea Trade-Investment Promotion Agency (Korean Government-Affiliated Organization)
 2004 – 2012 *Professional Translator/Interpreters*, Business Documentation, Korean University Exhibition, Korean Governor Taiwan Visit, etc.
 04/2006 – 03/2007 *Korean Teacher*, Private Institute for Korean Language, Taipei
 06/2004 – 08/2008 *Intern*, (1) Jewish Home Lifecare, New York; (2) Huashan Social Welfare Foundation for older adults, Taipei; (3) Daan Eldery Day Care Center, Taipei; (4) The Catholic Foundation of Alzheimer's Disease and Related Dementia, Taipei.

Honors, Prizes, and Awards

- 2014 *Invited to the League of European Research Universities (LERU)*
 Doctoral Summer School entitled ‘Doing the right things right’ –
 Research Integrity in a Complex Society
 Granted by the LERU and Graduate Campus, University of Zurich
- 2010 – 2013 *Taiwan Scholarship: three years full scholarship*
 Granted by the Government of Taiwan
 (Relinquished it in June 2011 to pursue PhD at University of Zurich)
- 2009 *Foreign Student Scholarship prize winner*
 Granted by the Rotary Club of Taipei Tienmu
- 2009 *International Graduate Student Support Fund winner*
 Granted by National Taiwan University
- 2009 *2009 Winner of the Chinese Writing Competition at a Superior Level
 for Non–native Speakers of Chinese*
 Hosted by the Ministry of Education, Taiwan
- 2008 *International Internship Expenses Support: New York, US*
 Granted by the Department of Social Work, National Taiwan
 University
- 2008 *The College of Social Sciences International Students Scholarship*
 Granted by the College of Social Science, National Taiwan University
- 2007 *International Graduate Student Support Fund winner*
 Granted by National Taiwan University
- 2005 *General Scholarship: one year full scholarship*
 Granted by the Ministry of Education in Taiwan
- 2004 *General Scholarship: one year full scholarship*
 Granted by the Ministry of Education in Taiwan
- 2003 *General Scholarship: one year full scholarship*
 Granted by the Ministry of Education in Taiwan

Scientific Presentations / Talks

- Shim, J. Y. (May, 2015). Healthy Ageing in Asia: A Laboratory for Ageing Research. Poster presentation at the LiMaDoKo of the Department of Psychology at the University of Zurich, Zurich, Switzerland.
- Shim, J. Y. & Röcke, C. (April, 2015). *How to Promote Social Support Behavior at 65+ in Asia? – Insights from Korea*. Poster presentation at the International Association of Gerontology and Geriatrics European Region Congress 2015, Dublin, Ireland
- Shim, J. Y. (Dec., 2014). *Networks, Social Work, Gerontopsychology and Social Support in Asia*. Invited talk and Colloquium (together with Prof. Dr. Horst Uecker) at the FHS St. Gallen, University of Applied Sciences, St. Gallen, Switzerland.
- Shim, J. Y. (Nov., 2014). *Gerontology and social support at 65+: Korea, Taiwan, Switzerland and US*. Invited talk at the Shira Rusky Center, New York, US
- Shim, J. Y. (Nov., 2014). *Gerontology and social support at 65+: Korea, Taiwan, Switzerland and US*. Invited talk at the Jewish Home Lifecare, Bronx Division, New York, US
- Shim, J. Y., Martin, M., & Röcke, C. (Nov., 2014). *Linking Resources and Social Support at 65+: Findings from the Korean Longitudinal Study of Ageing (KLoSA)*. Poster presentation at the Gerontological Society of America, 67th Annual Scientific Meeting, Washington DC, US.
- Shim, J. Y., Martin, M., & Röcke, C. (May, 2014). *The Relation between Social Support Potential Changes and Social Support Behavior in Korean Adults Aged 65 +: Findings from the Korean Longitudinal Study of Ageing (KLoSA)*. Poster presentation at the 22nd Nordic Congress of Gerontology congress, Gothenburg, Sweden.
- Shim, J. Y. (May, 2014). *Networks, Social Work and Social Support in Asia*. Invited talk and Colloquium (together with Prof. Dr. Horst Uecker) at the FHS St. Gallen, University of Applied Sciences, St. Gallen, Switzerland.
- Shim, J. Y., Martin, M., & Röcke, C. (Jan., 2014). *Intragenerational Social Support Potential in Korean Adults Aged 65+*. Poster presentation at the Schweizerische Gesellschaft für Gerontologie Kongress, Freiburg, Switzerland.